

FIG. 1

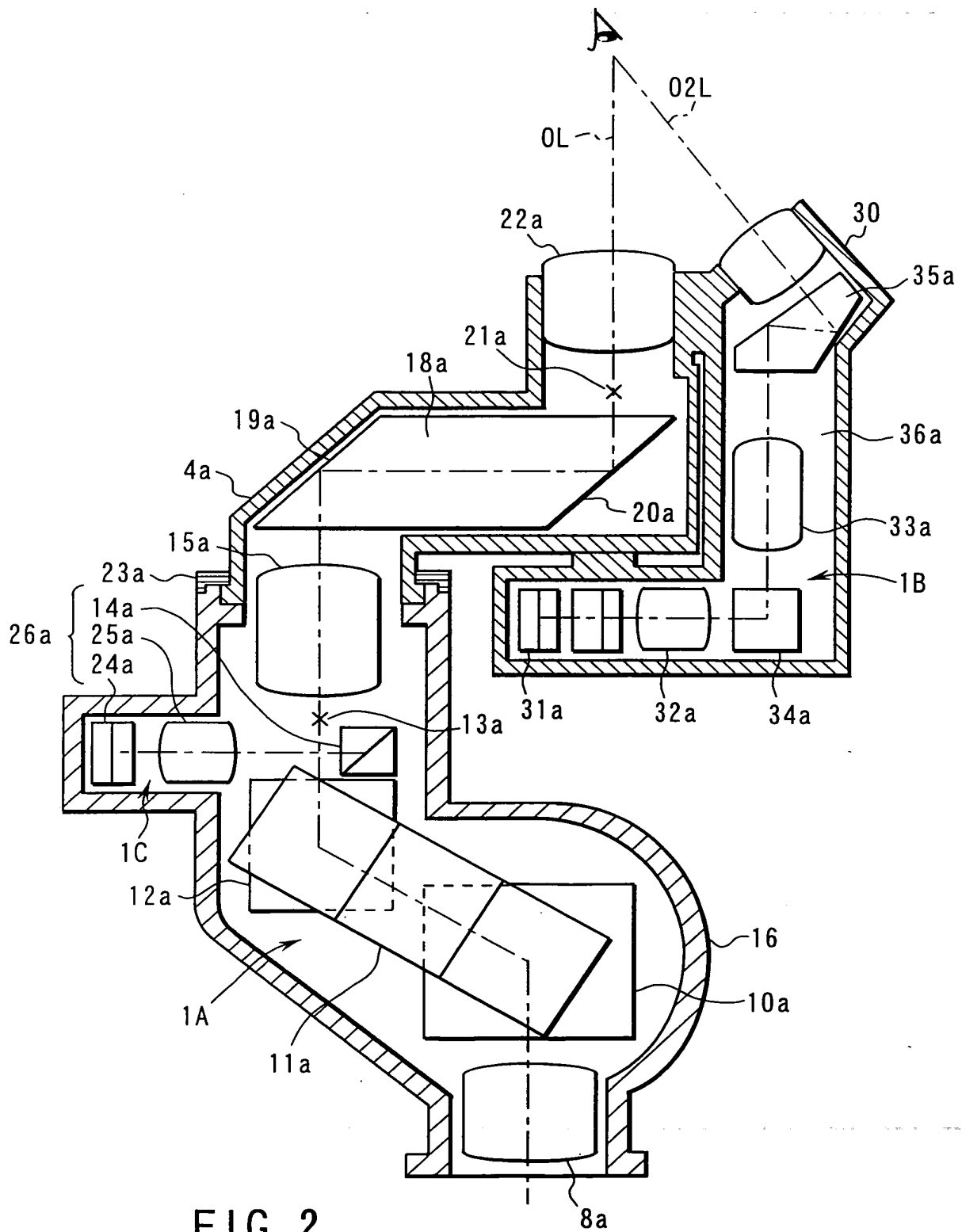


FIG. 2

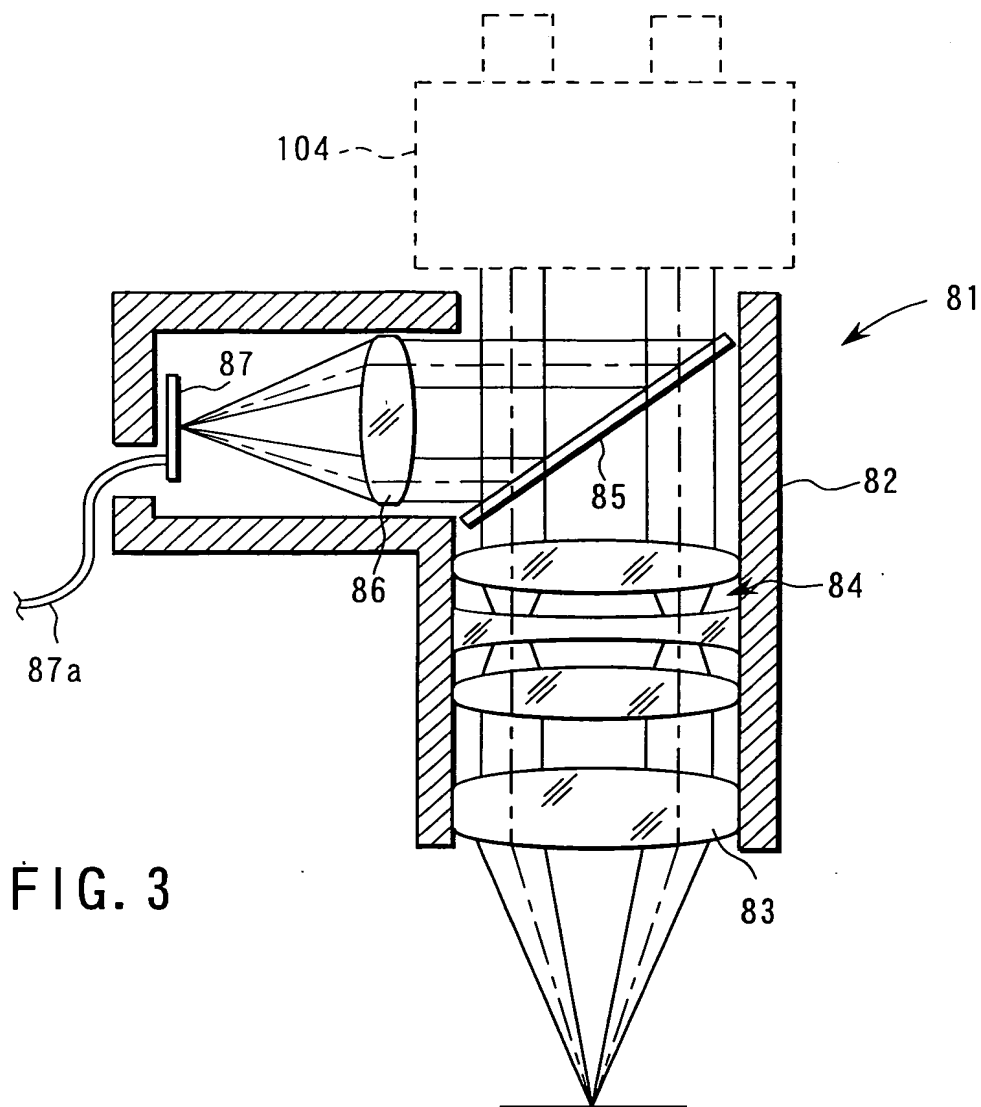


FIG. 3

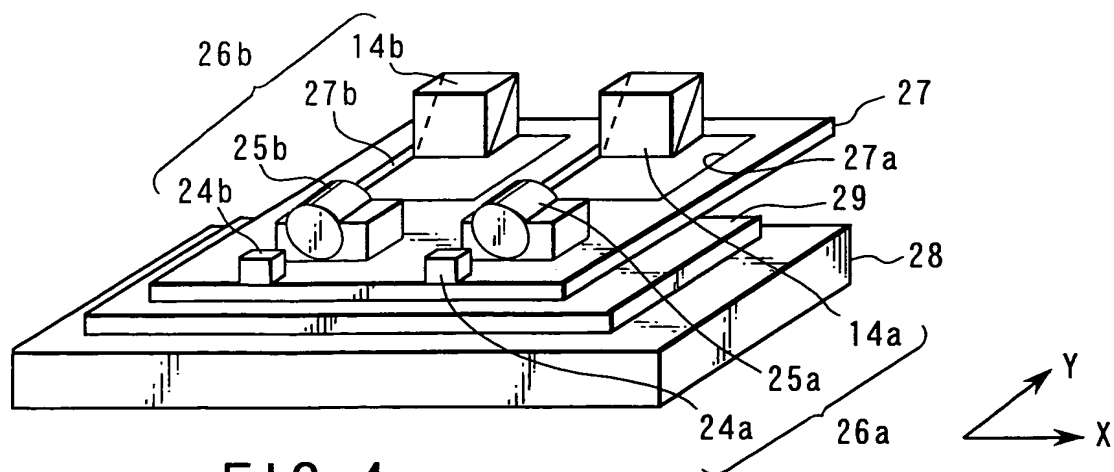


FIG. 4

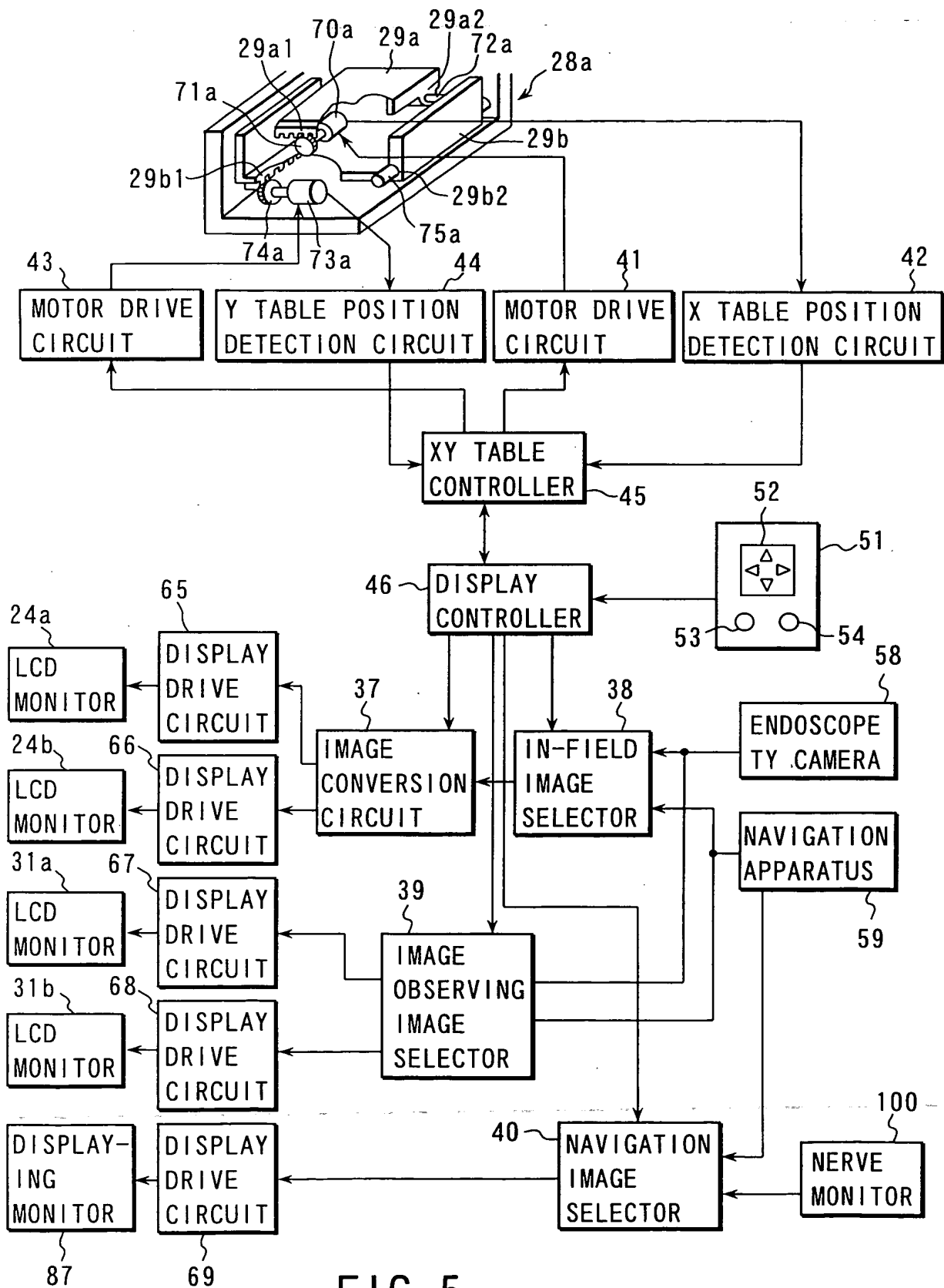


FIG. 5

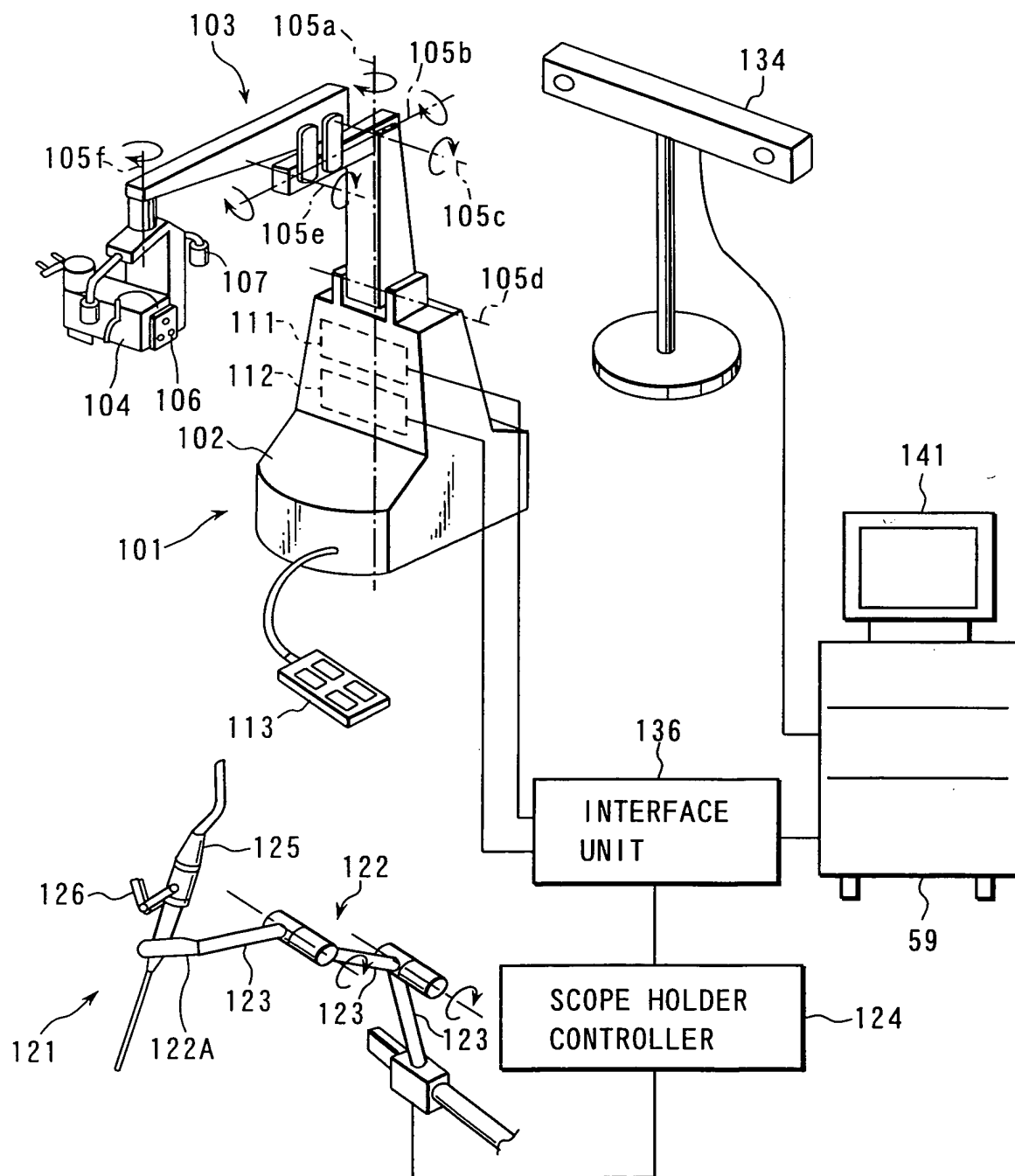


FIG. 6

FIG. 7

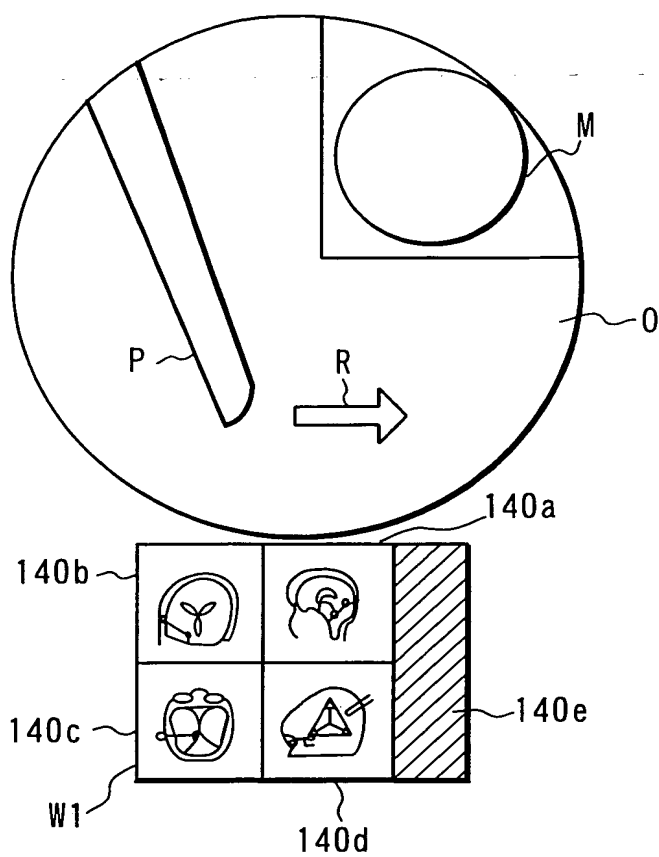
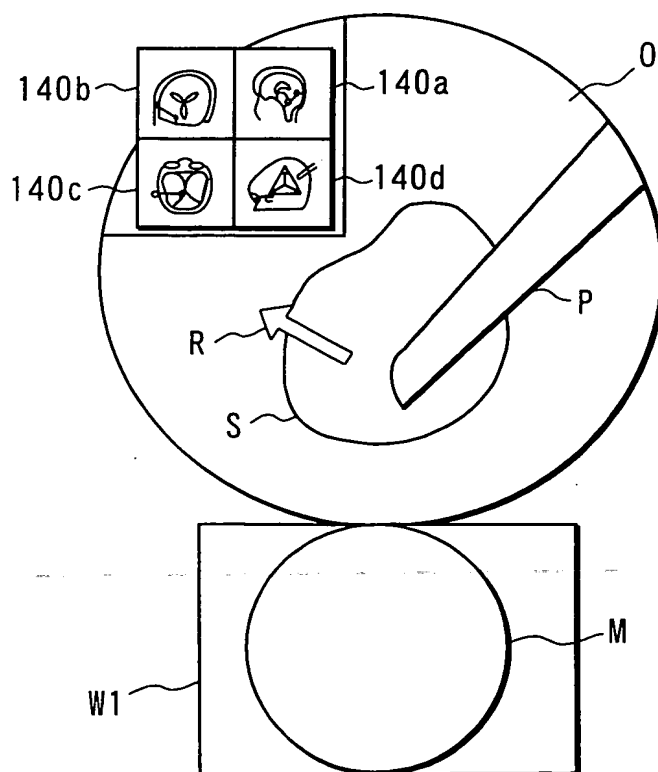


FIG. 8



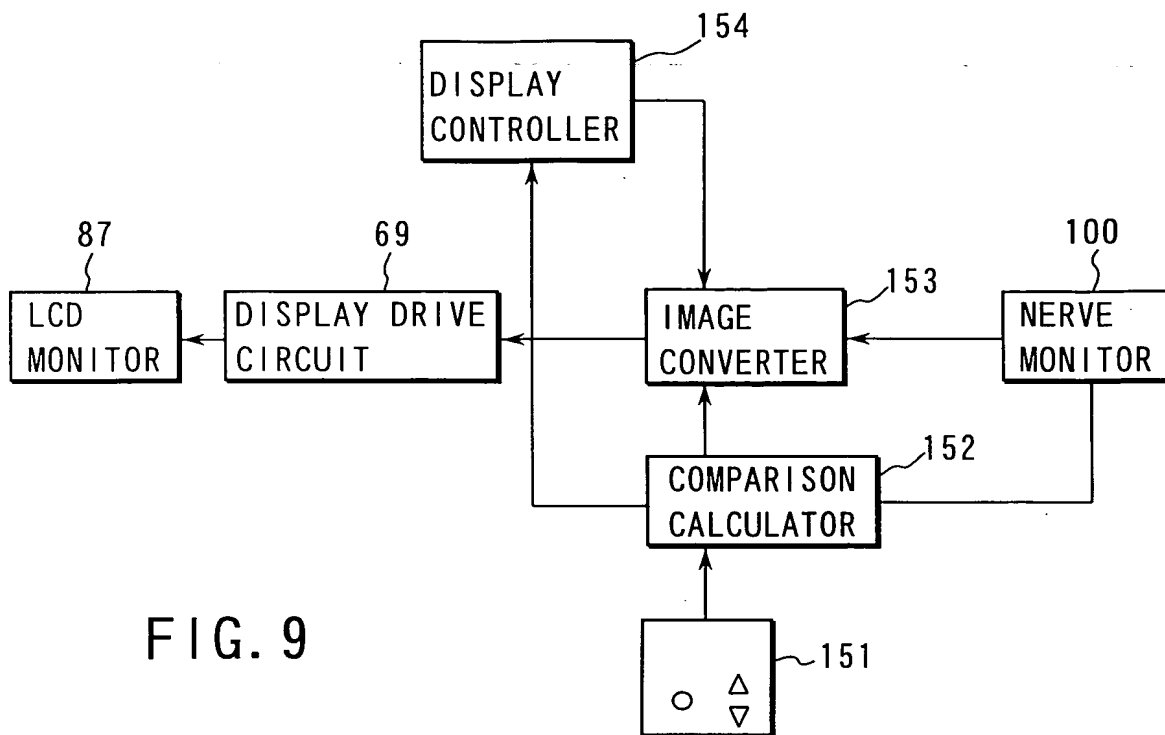


FIG. 9

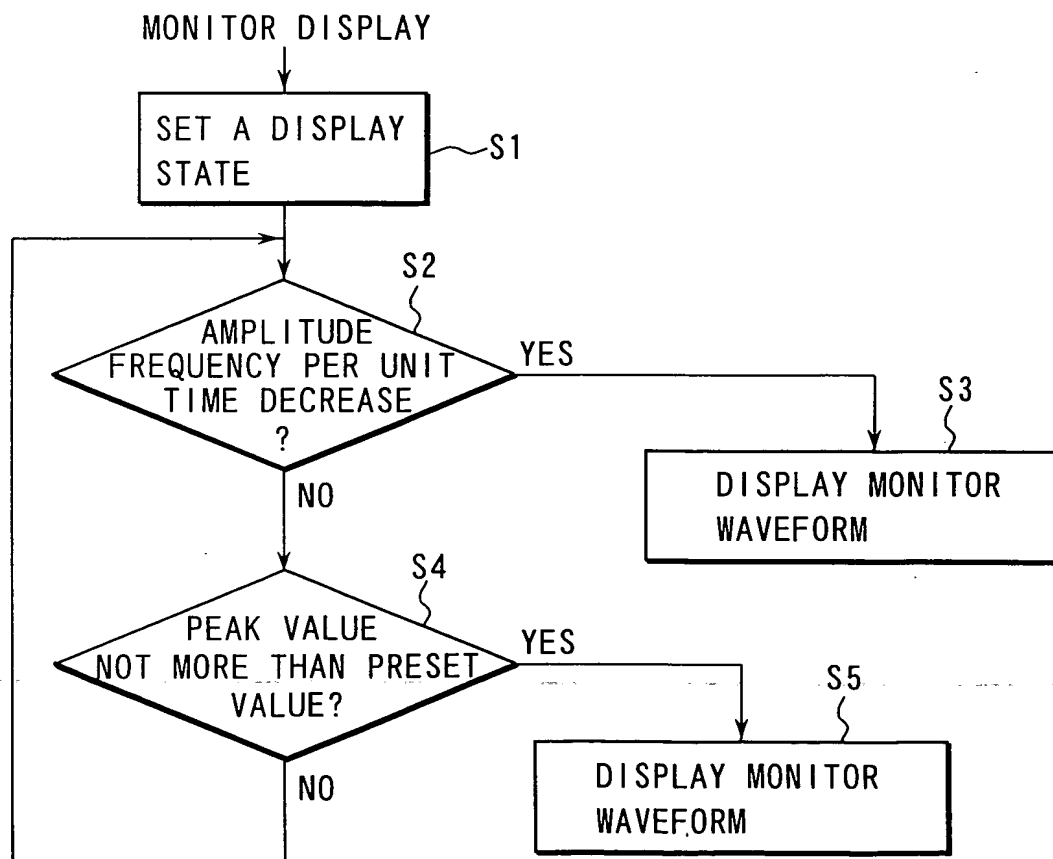


FIG. 10

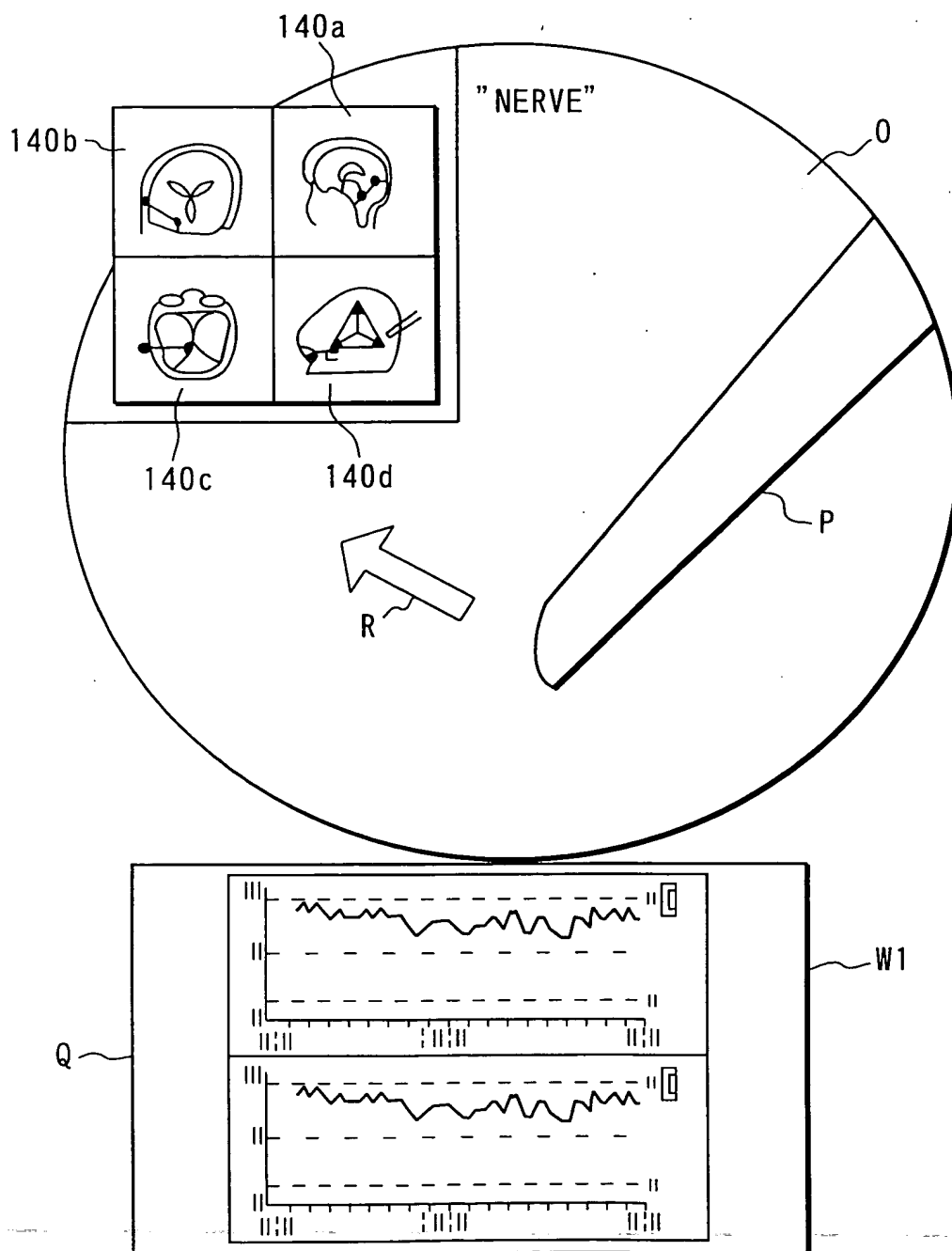


FIG. 11

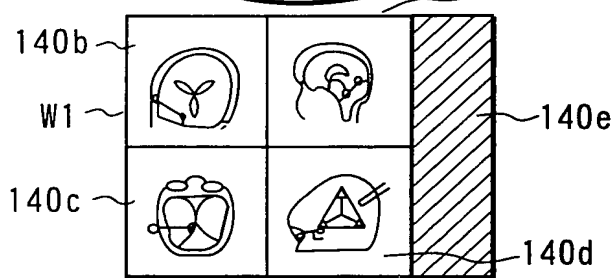
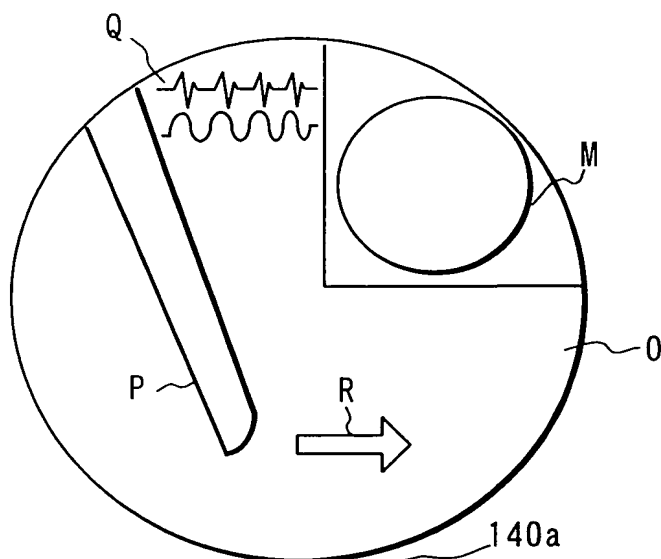


FIG. 12

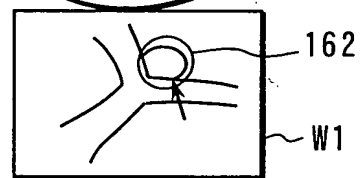
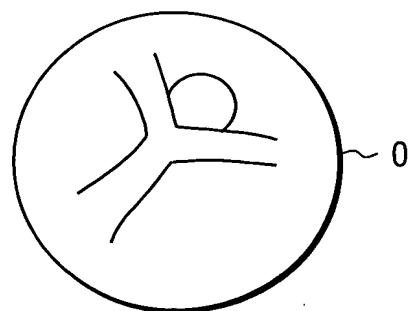


FIG. 14

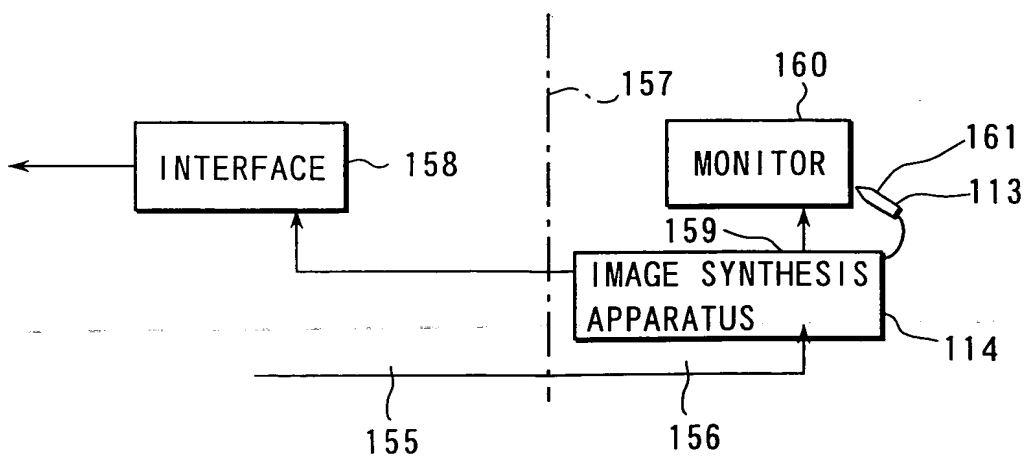


FIG. 13

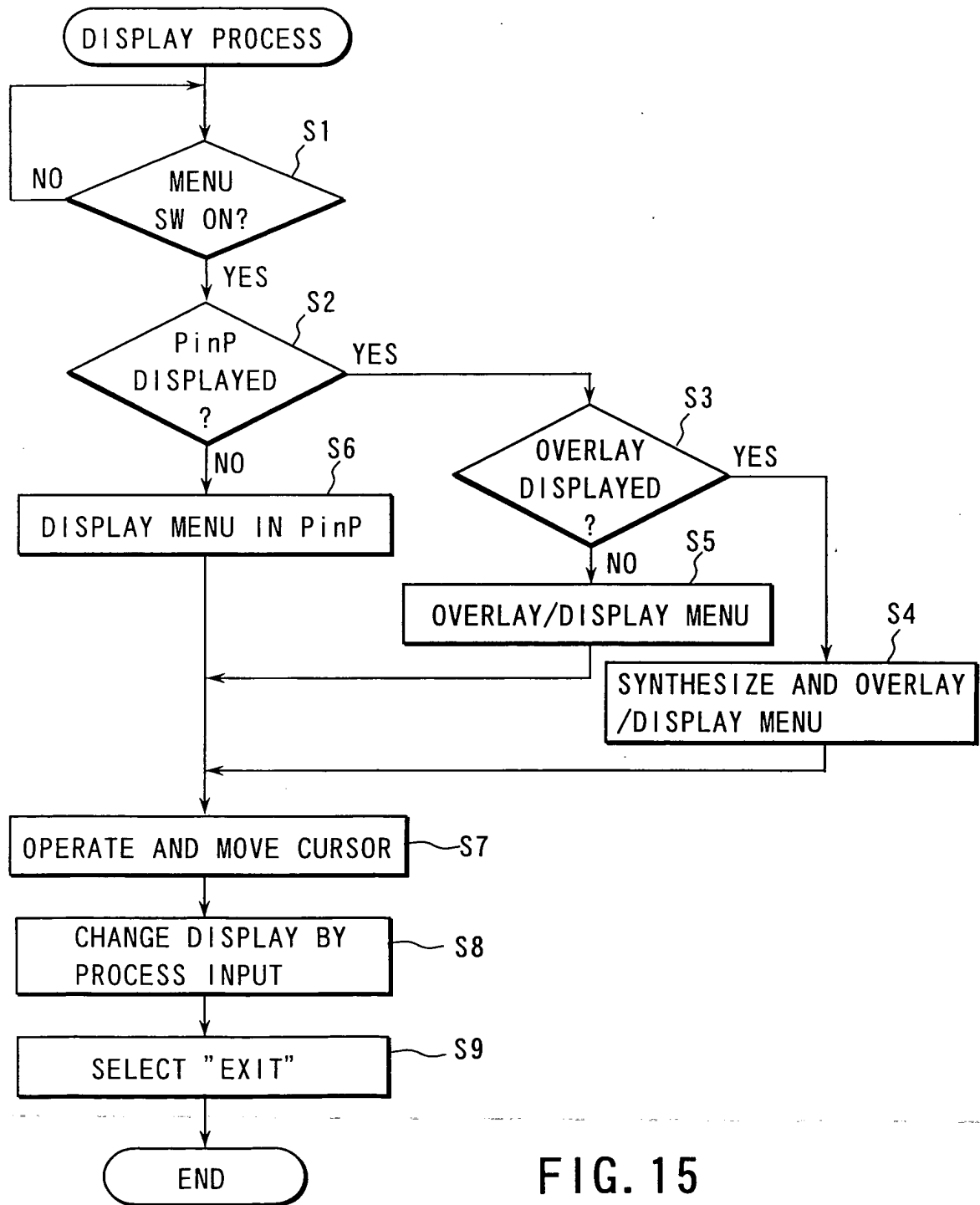


FIG. 15

FIG. 16

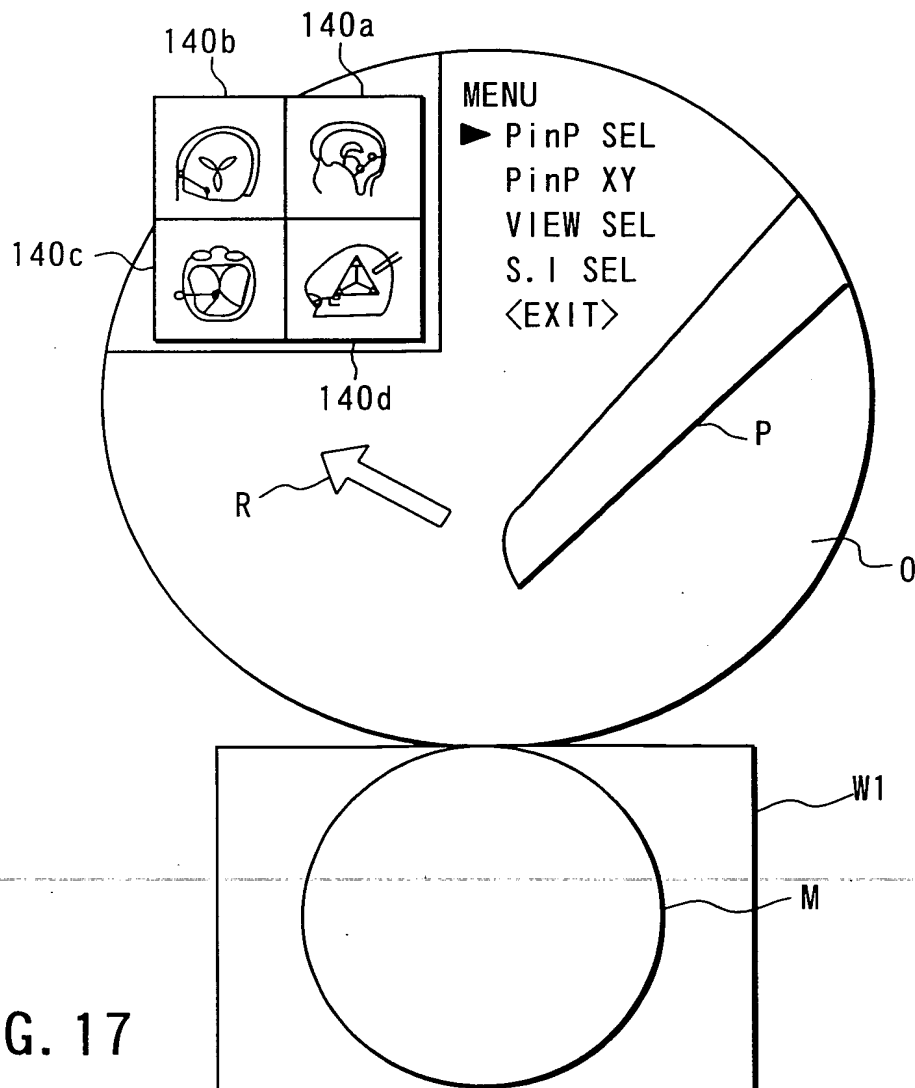
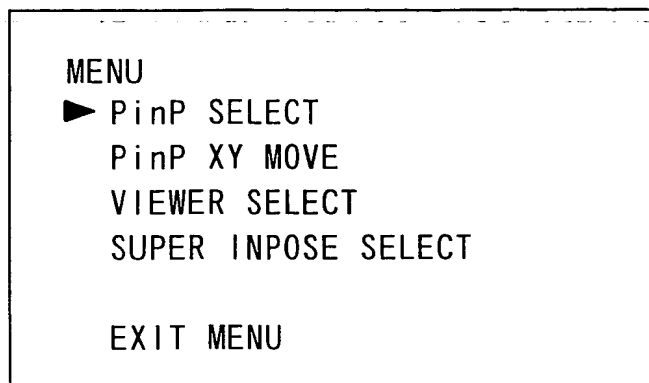


FIG. 17

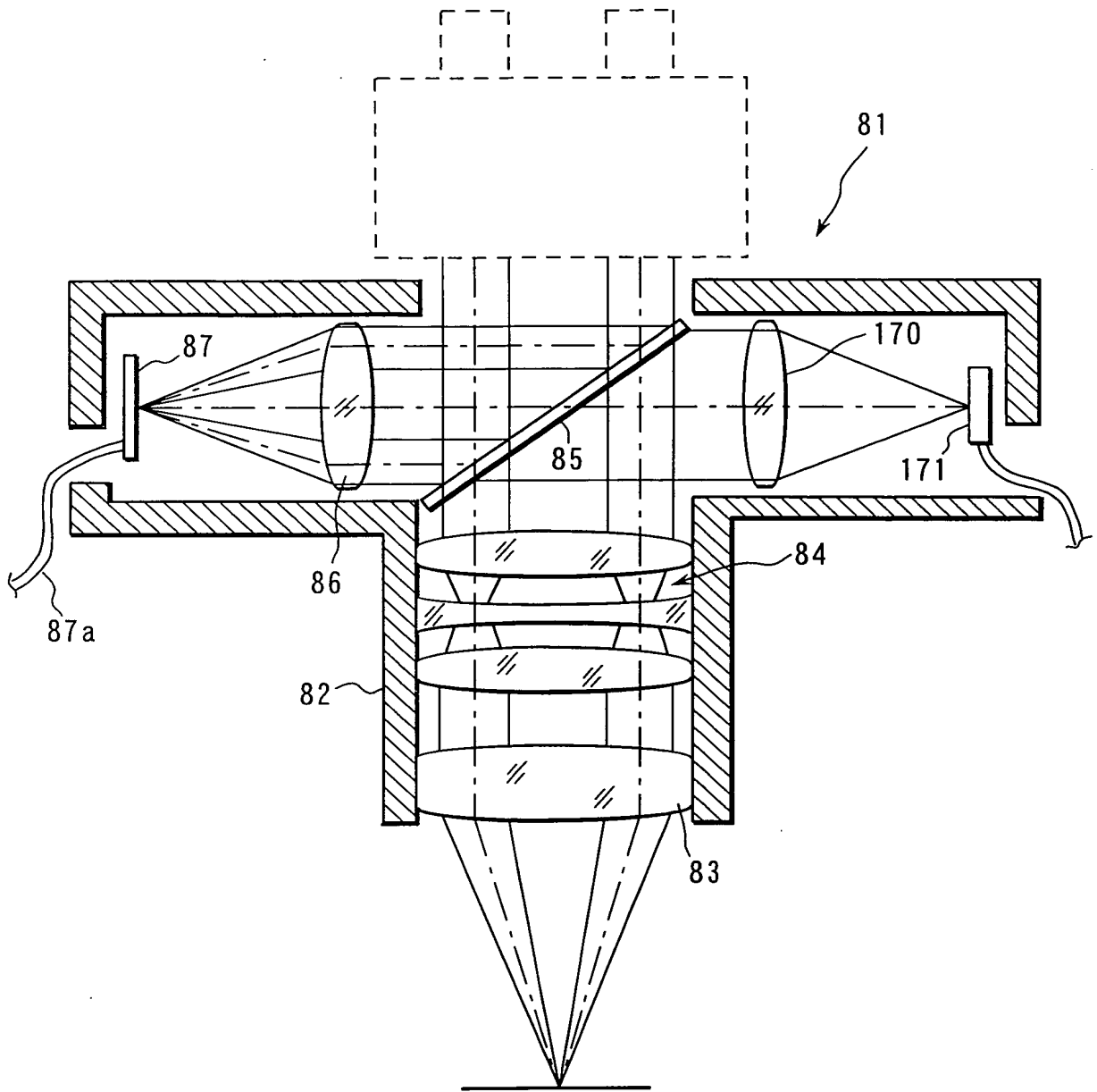


FIG. 18

FIG. 19

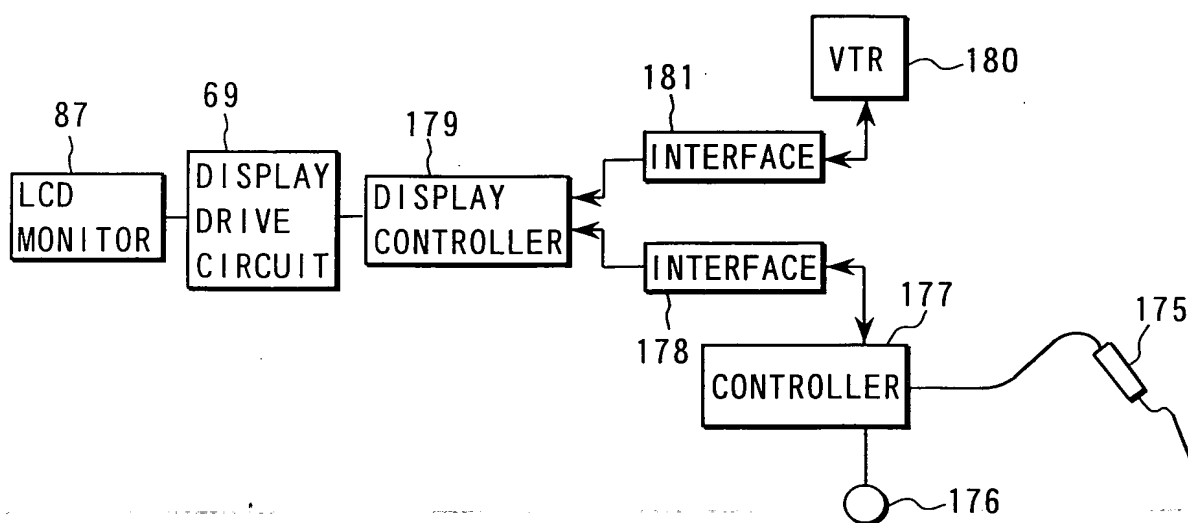
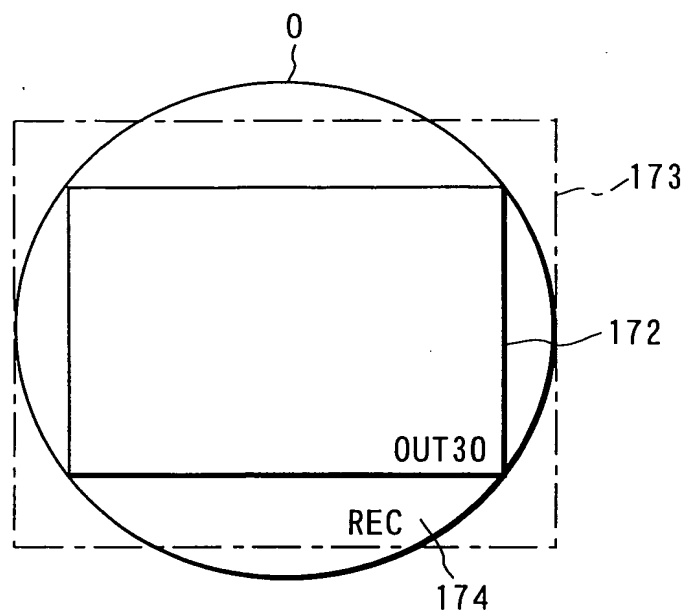


FIG. 20

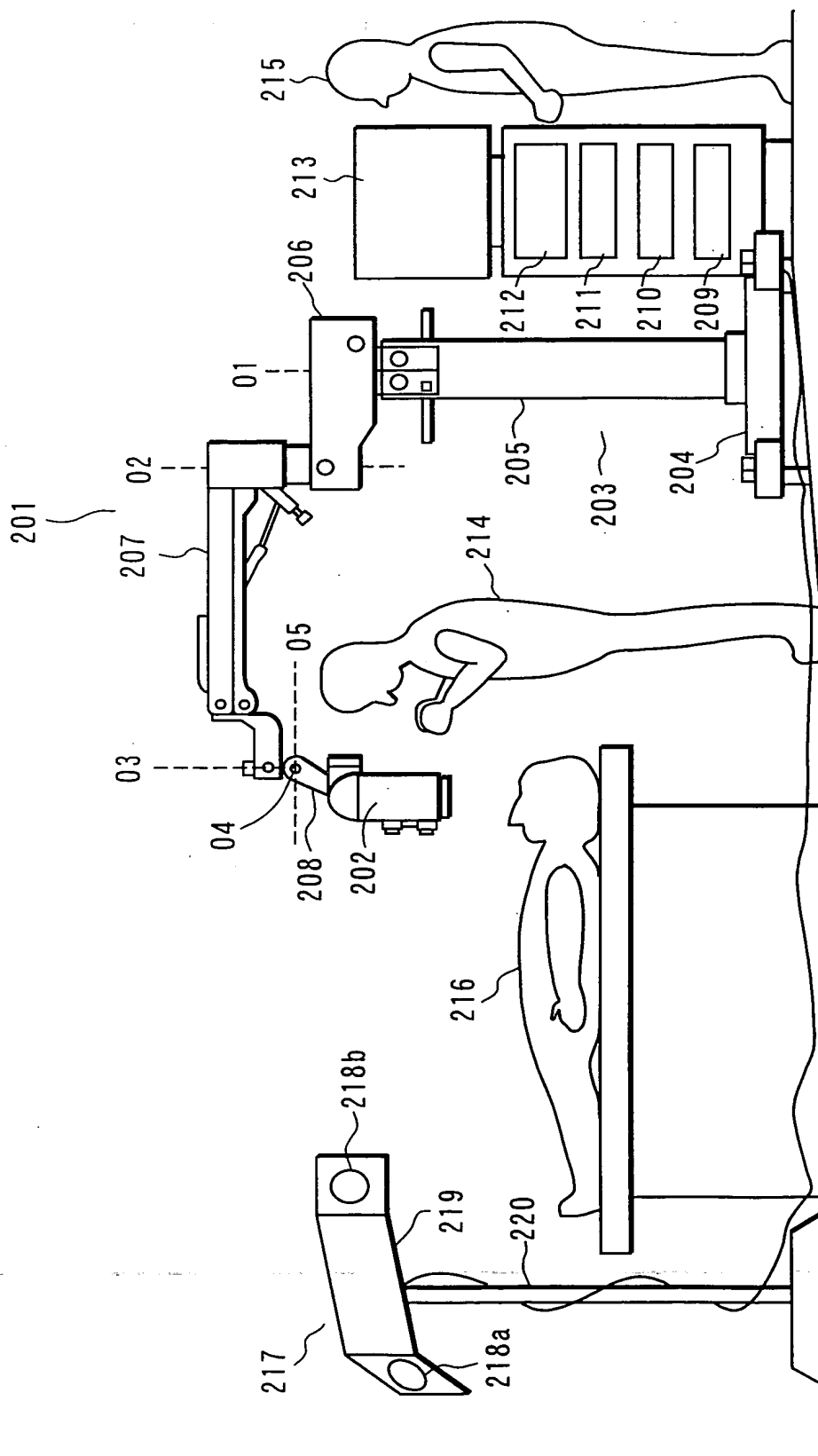


FIG. 21

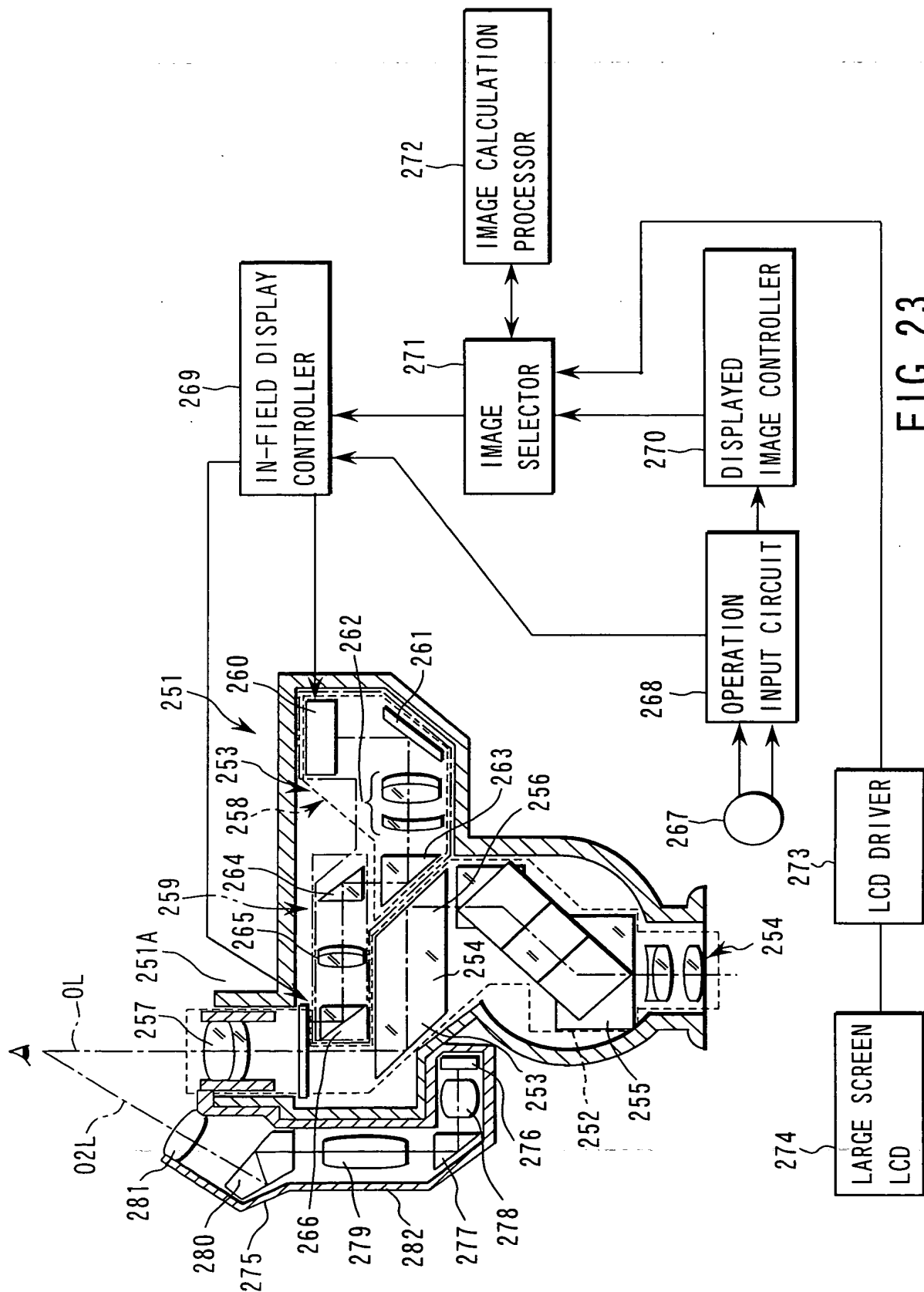


FIG. 23

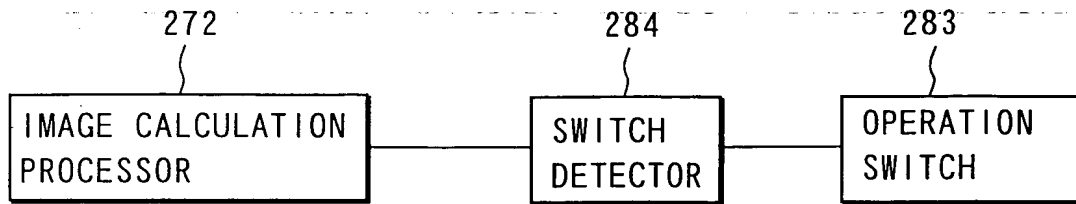


FIG. 24

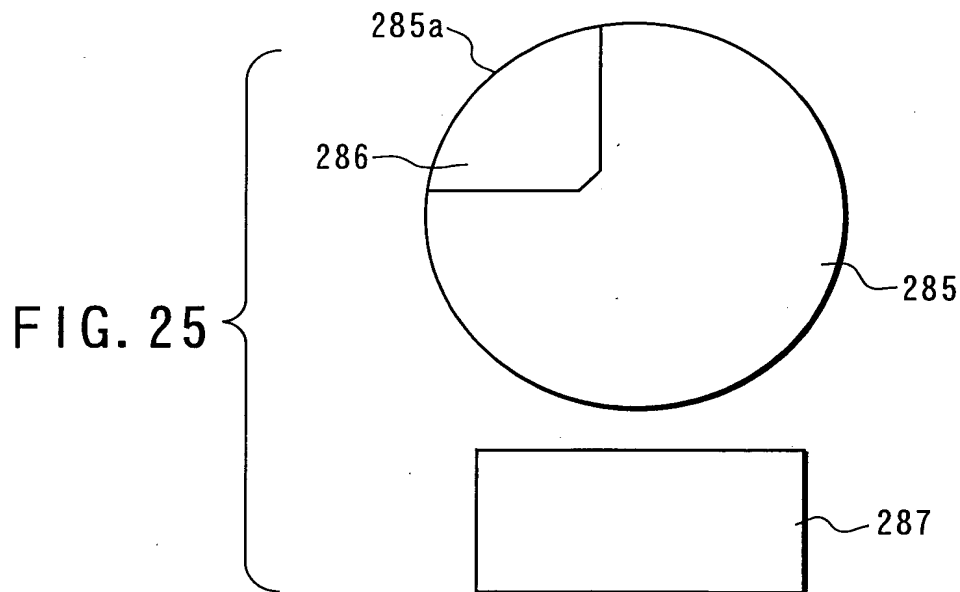


FIG. 26A



FIG. 26B

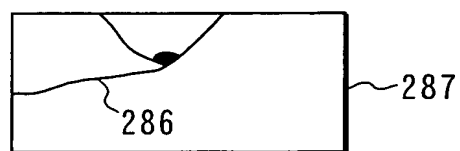
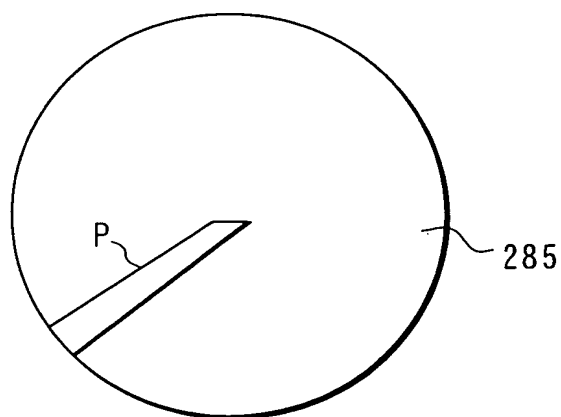


FIG. 27

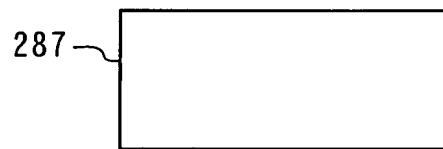
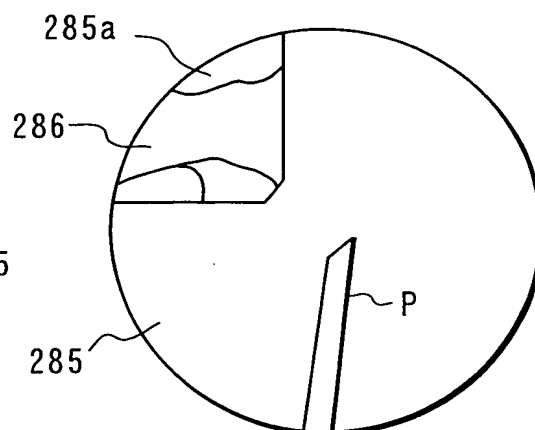


FIG. 28

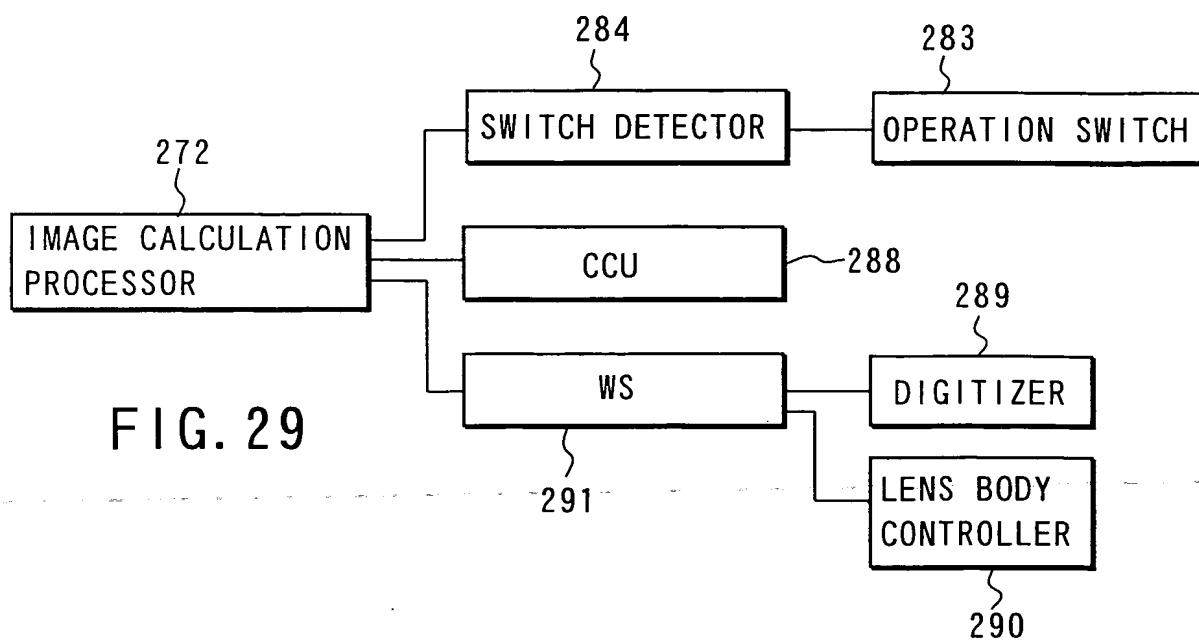


FIG. 29

WHEN SCOPE HOLDER
IS FIXED

SMALL SCREEN:PRE-OPERATIVE IMAGE
LARGE SCREEN:ENDOSCOPE IMAGE

FIG. 30A

WHEN SCOPE HOLDER
MOVES

SMALL SCREEN:ENDOSCOPE IMAGE
LARGE SCREEN:NO DISPLAYED IMAGE

FIG. 30B

FIG. 31

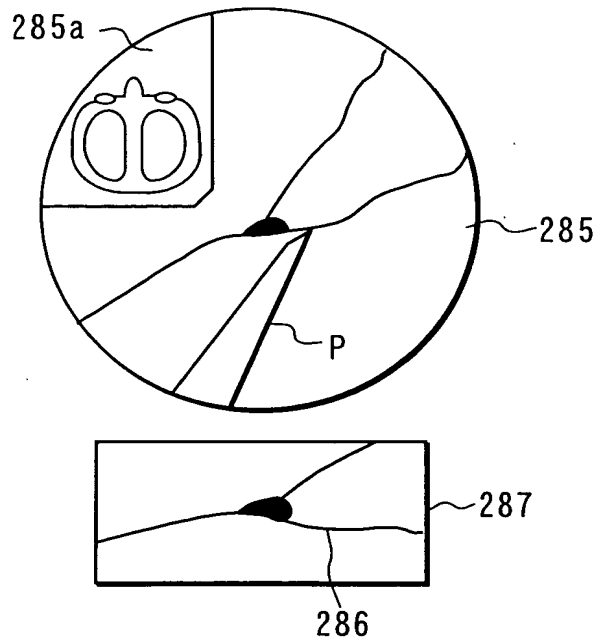
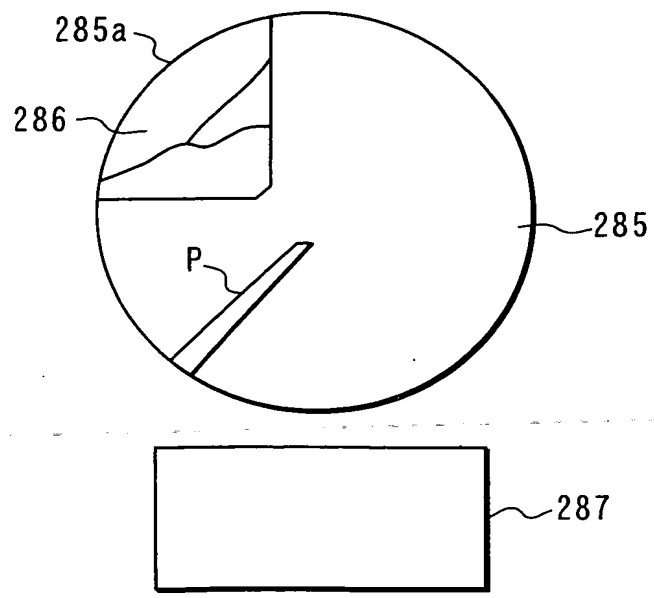


FIG. 32



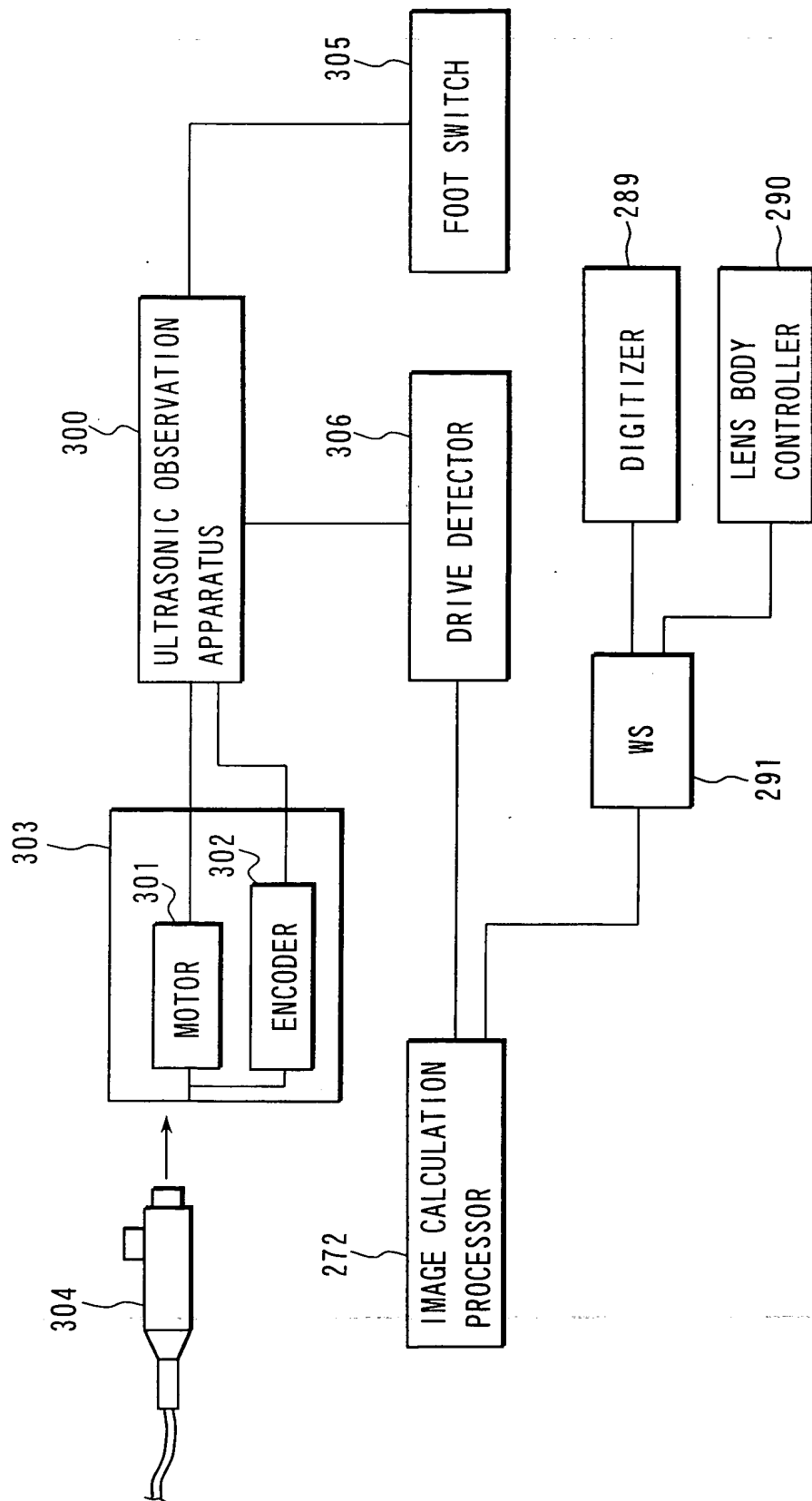
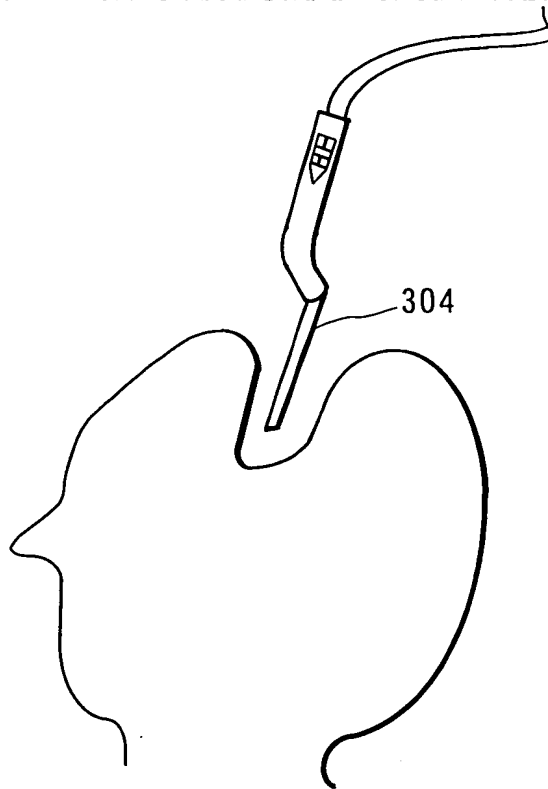


FIG. 33

FIG. 34



DURING ULTRASONIC
OBSERVATION

SMALL SCREEN: PRE-OPERATIVE IMAGE
(ULTRASONIC OBSERVER PLANE IMAGE)
LARGE SCREEN: ULTRASONIC OBSERVATION
IMAGE

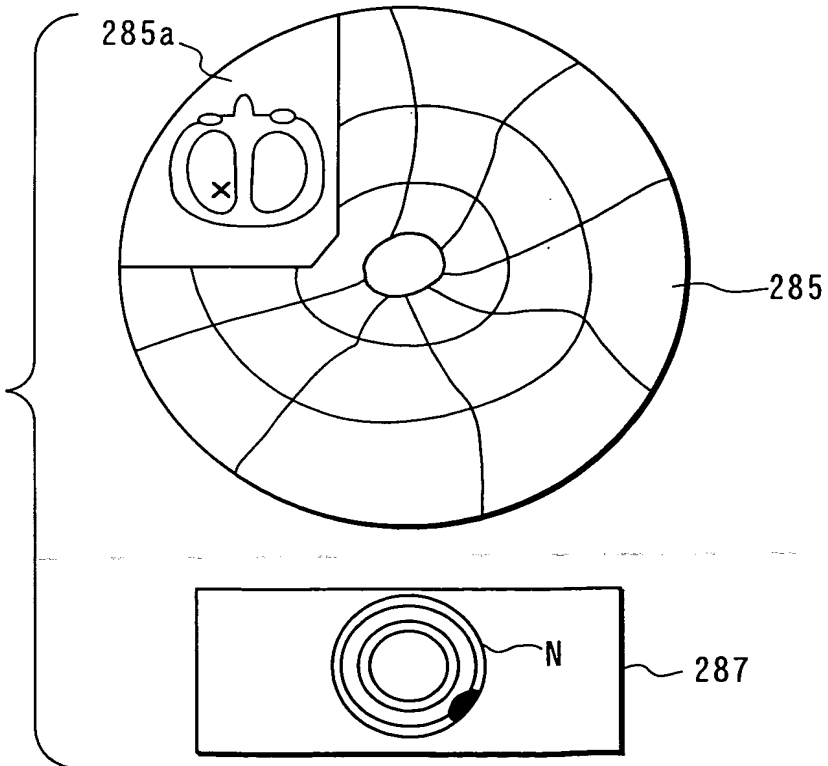
FIG. 35A

EXCEPT FOR ULTRASONIC
OBSERVATION

SMALL SCREEN: PRE-OPERATIVE IMAGE
(ENTIRE HEAD IMAGE)
LARGE SCREEN: ULTRASONIC OBSERVATION
IMAGE

FIG. 35B

FIG. 37



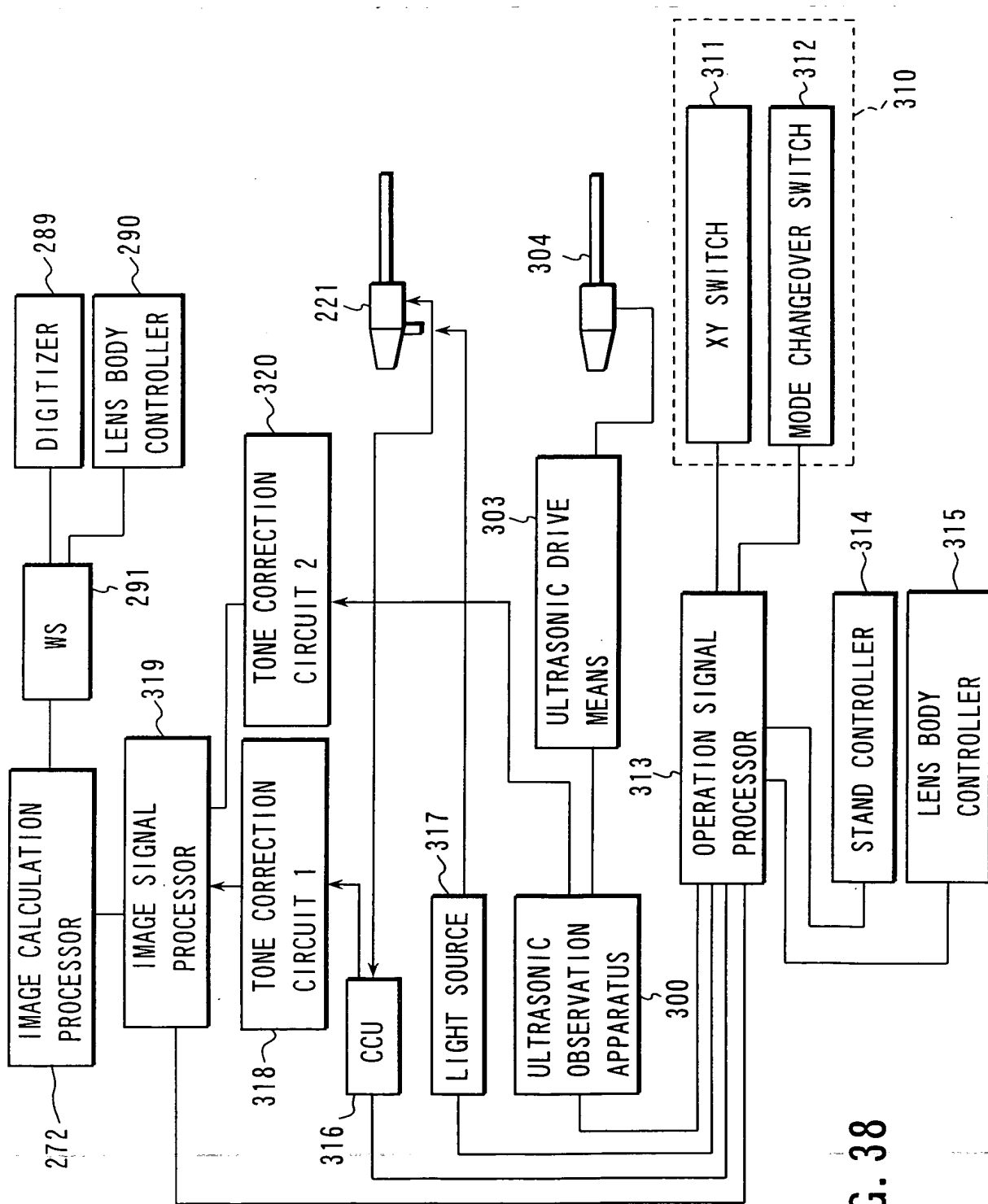


FIG. 38

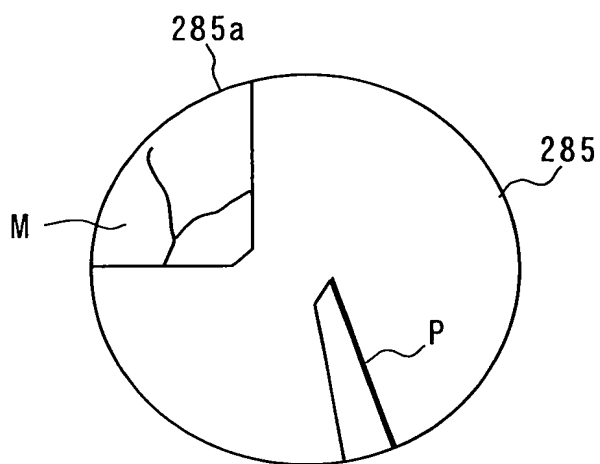


FIG. 39

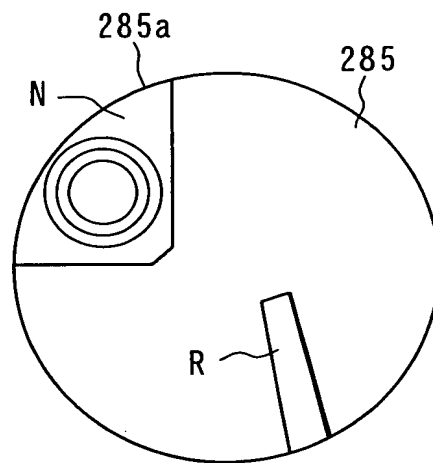


FIG. 40

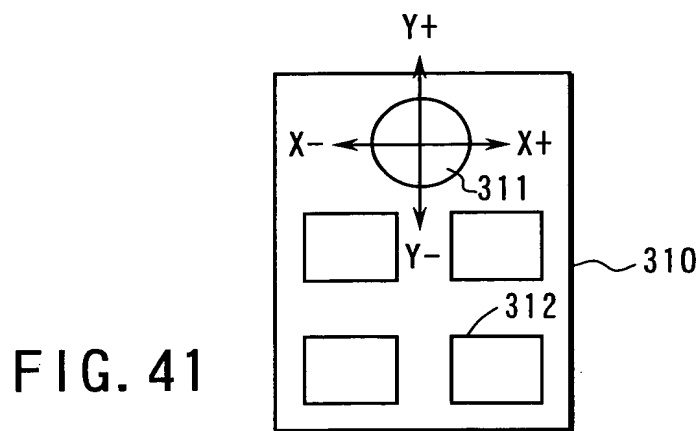


FIG. 41

WHEN ENDOSCOPE IMAGE IS
DISPLAYED IN FIELD

X+:ENDOSCOPE ZOOM-UP

X-:ENDOSCOPE ZOOM-DOWN

Y+:ENDOSCOPE LIGHT AMOUNT UP

Y-:ENDOSCOPE LIGHT AMOUNT DOWN

FIG. 42

WHEN ULTRASONIC IMAGE IS
DISPLAYED IN FIELD

X+:SCAN START

X-:SCAN STOP

Y+:DISPLAYED IMAGE RIGHT ROTATION

Y-:DISPLAYED IMAGE LEFT ROTATION

FIG. 43

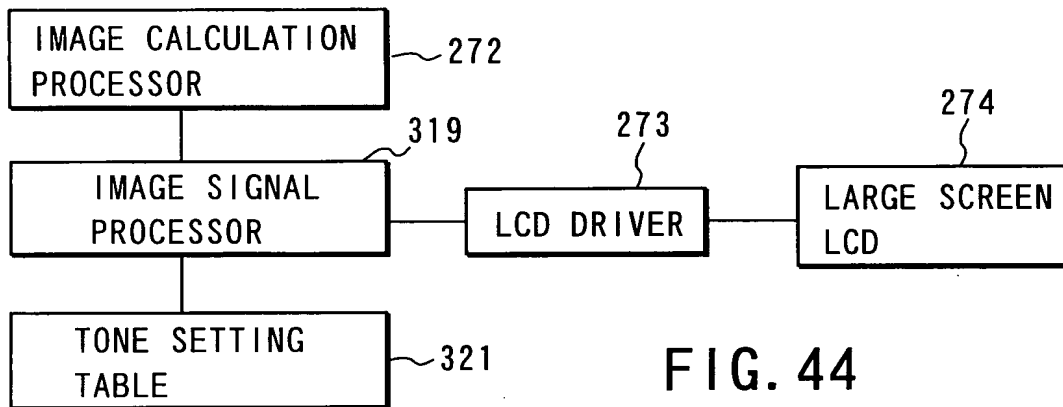


FIG. 44

FIG. 45

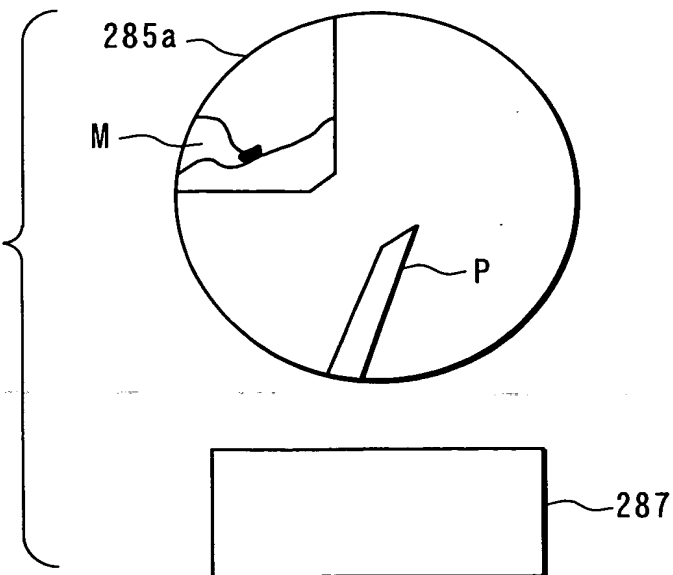


FIG. 46

FIG. 46

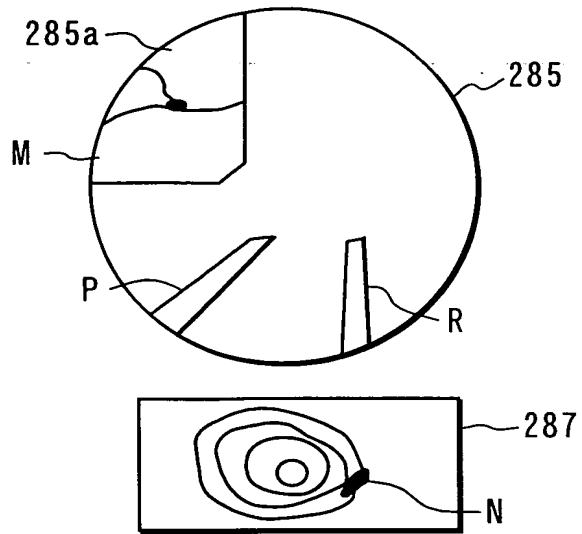


FIG. 47

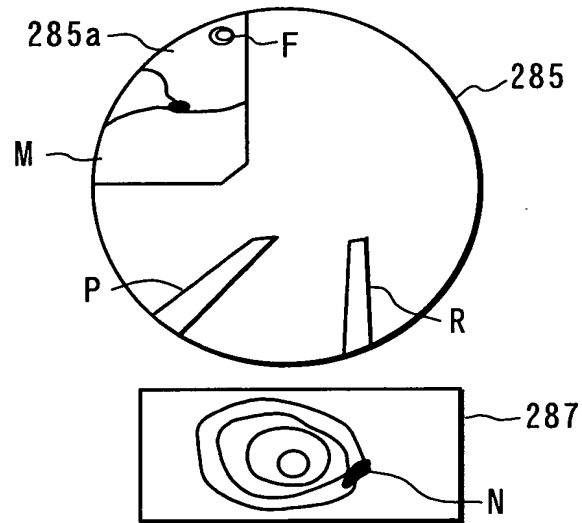


FIG. 48

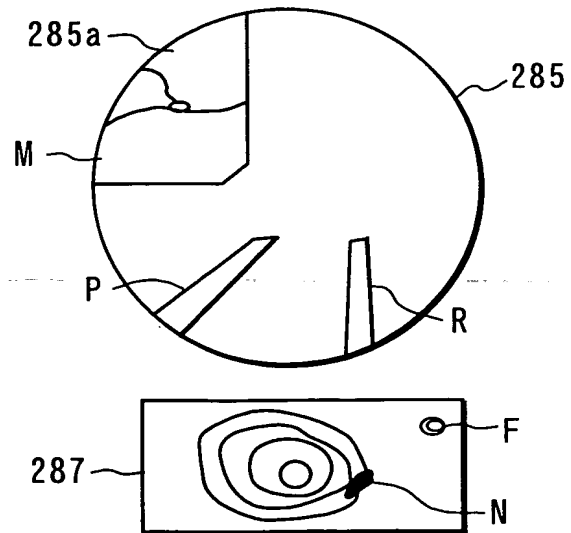


FIG. 49

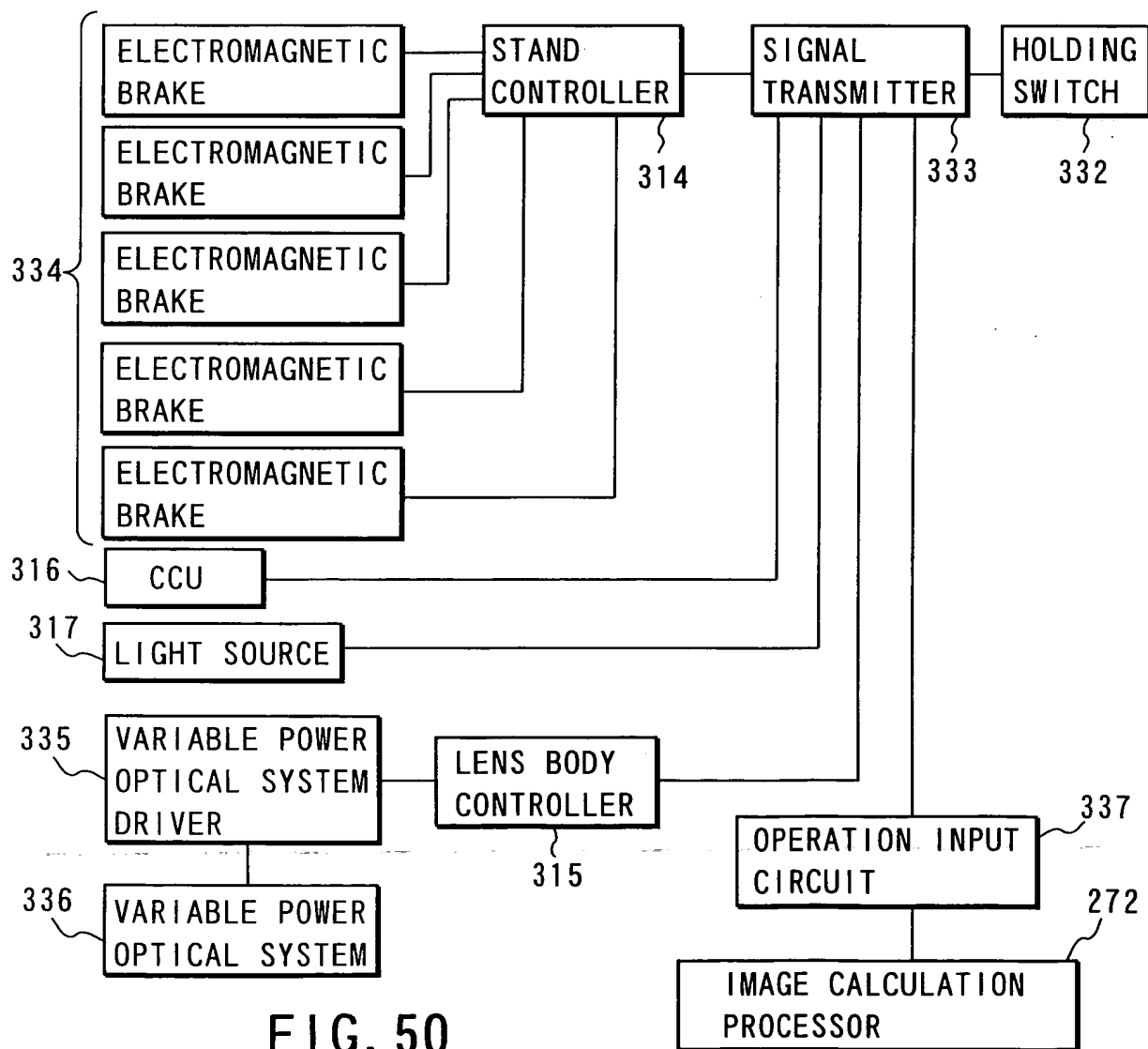
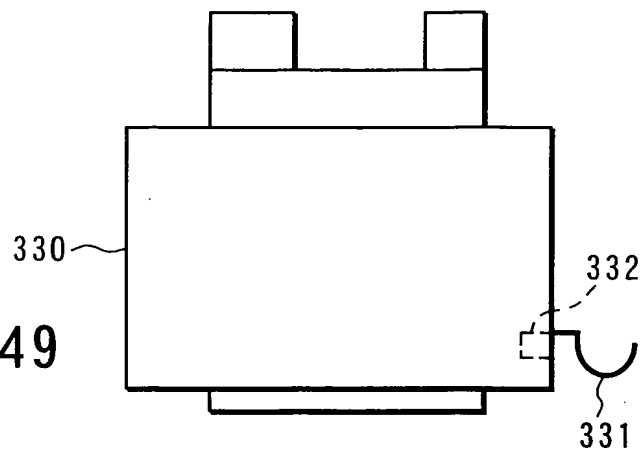


FIG. 50

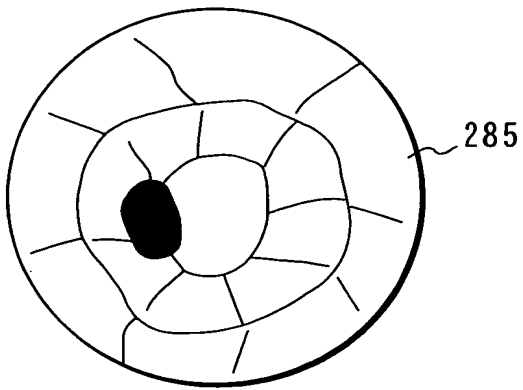


FIG. 51

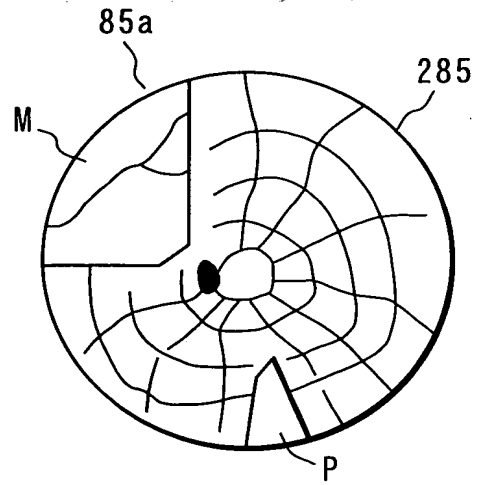


FIG. 52

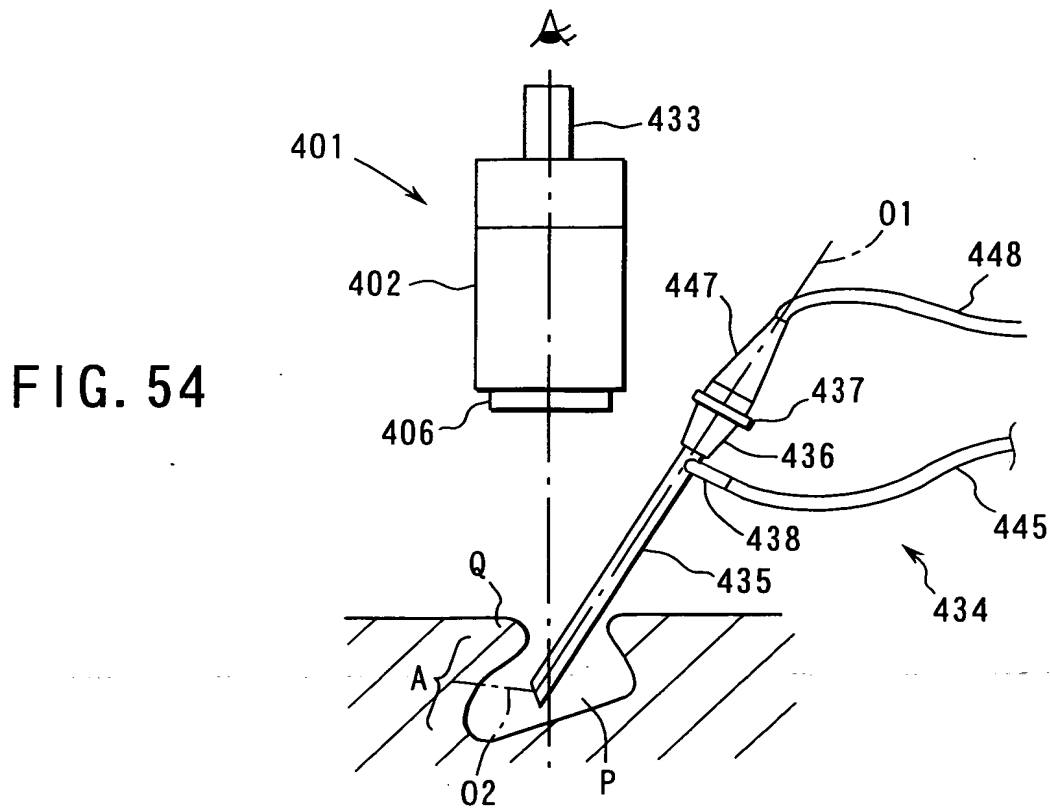


FIG. 54

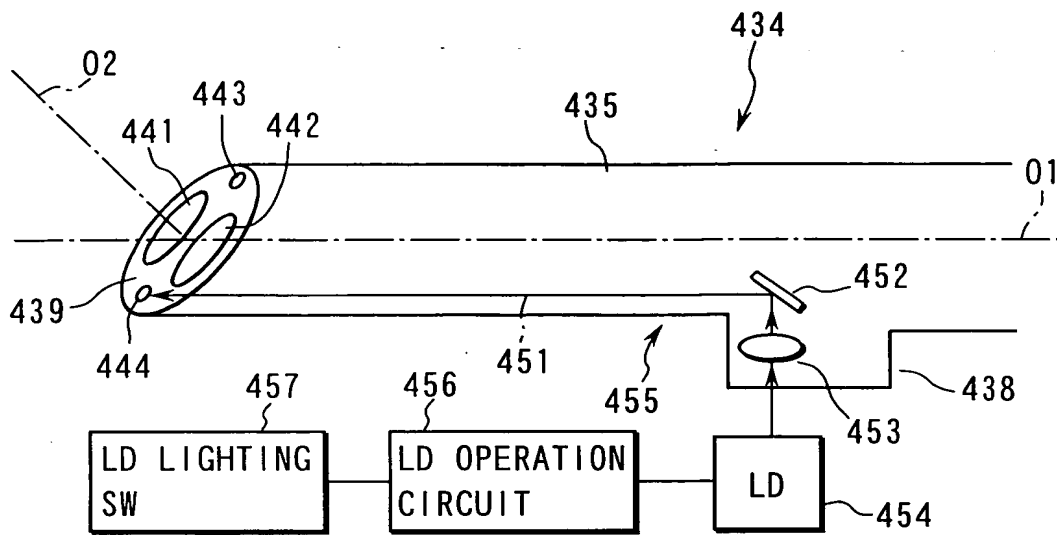


FIG. 53A

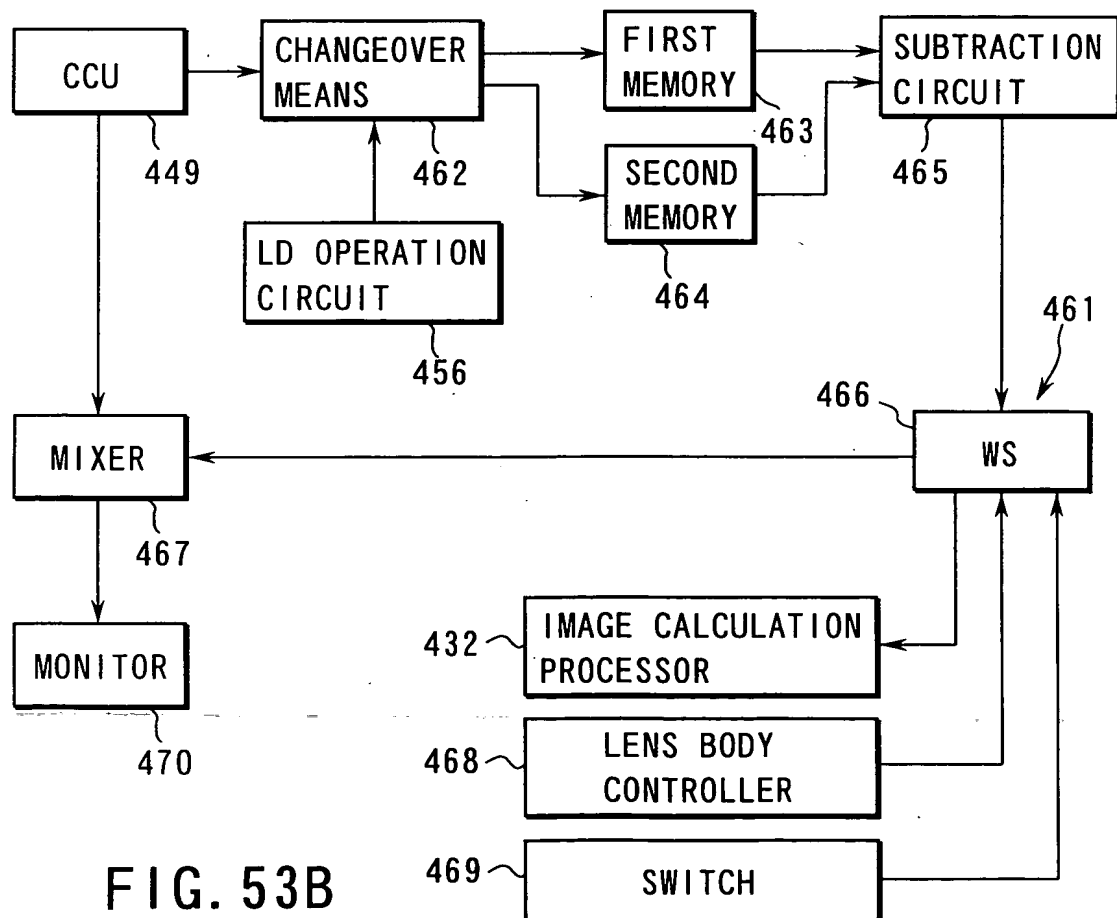


FIG. 53B

FIG. 55

FIG. 55

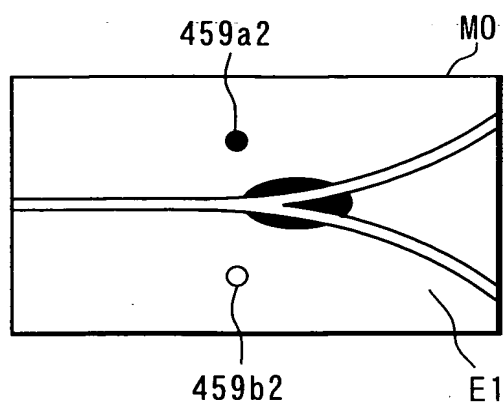


FIG. 56

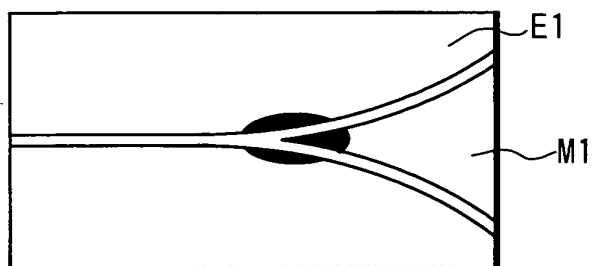


FIG. 57

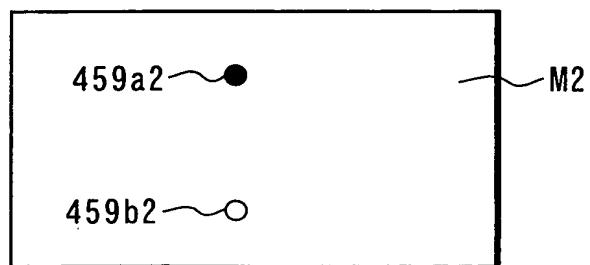
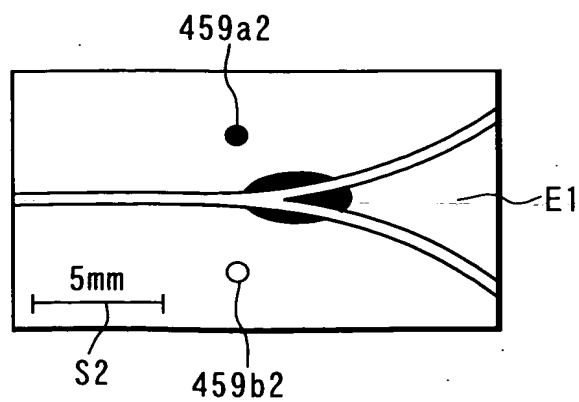
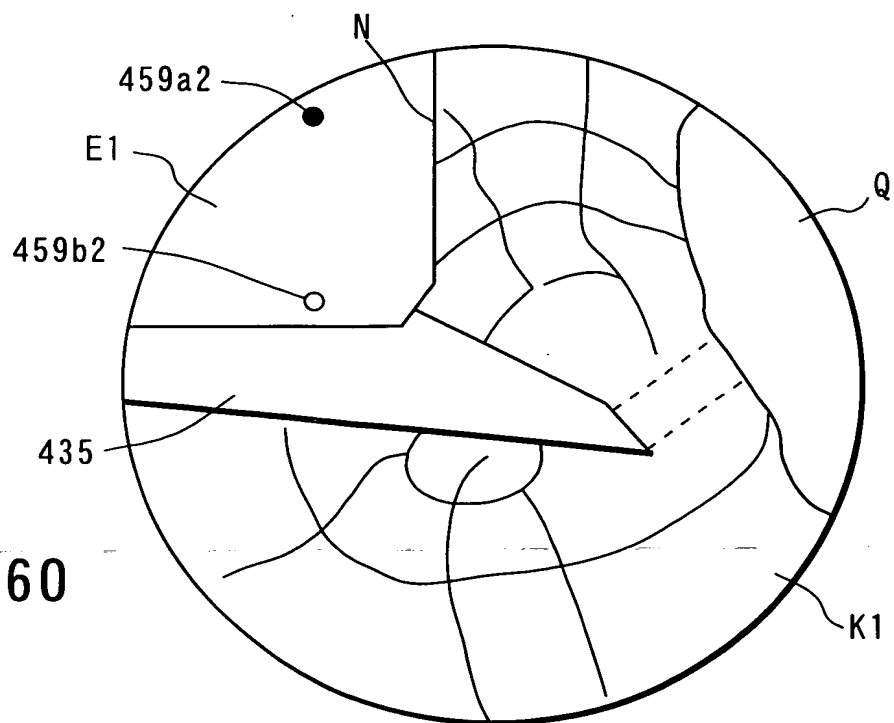
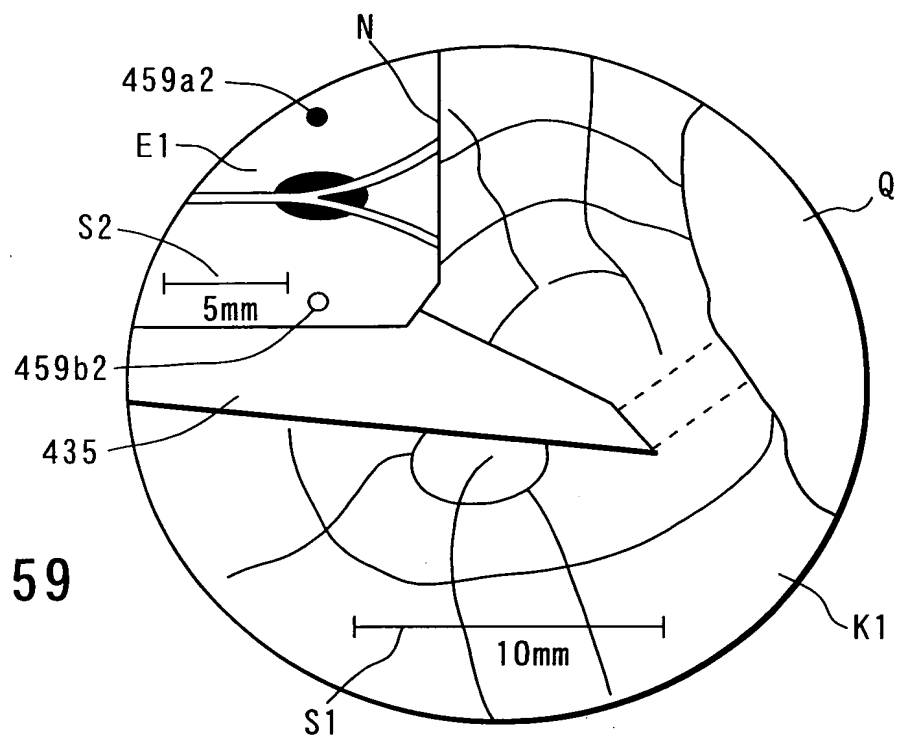


FIG. 58





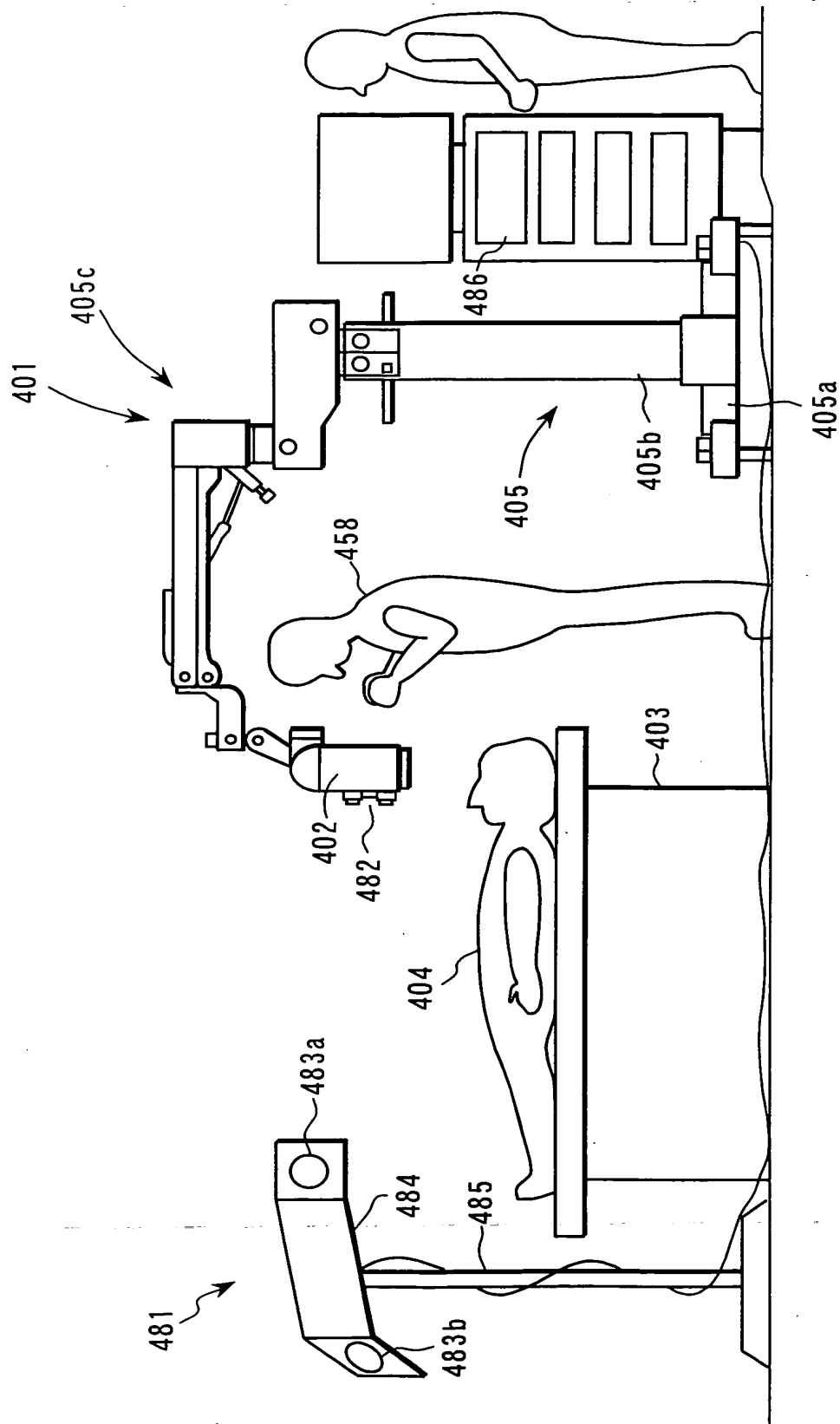


FIG. 61

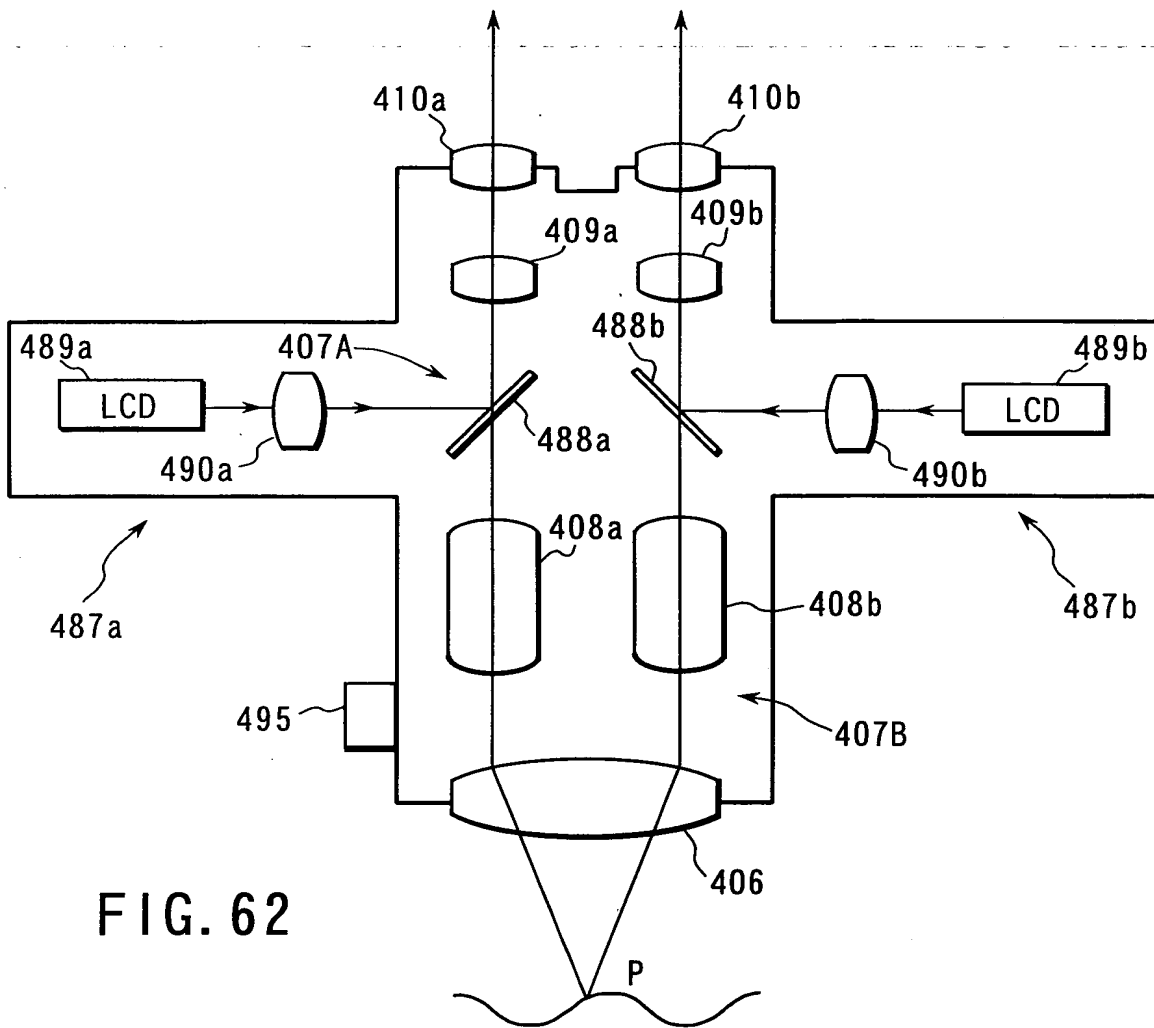


FIG. 62

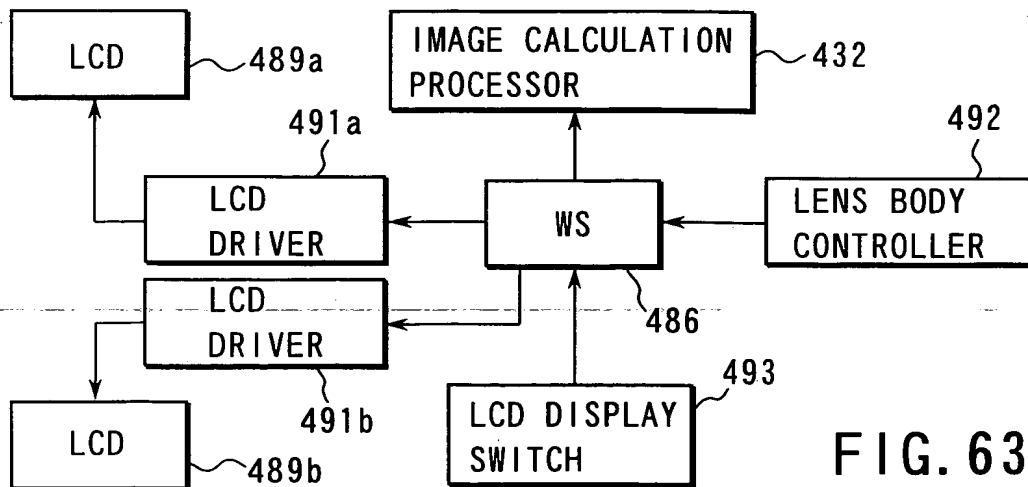


FIG. 63

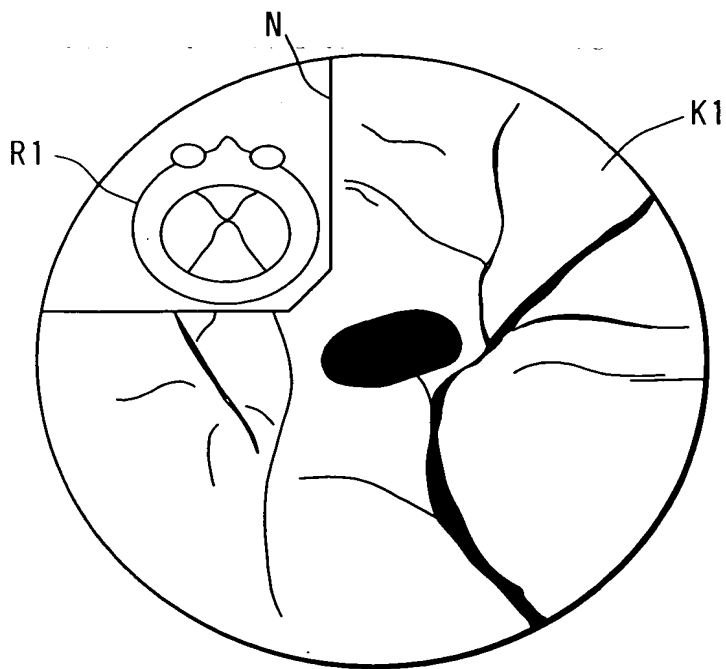


FIG. 64

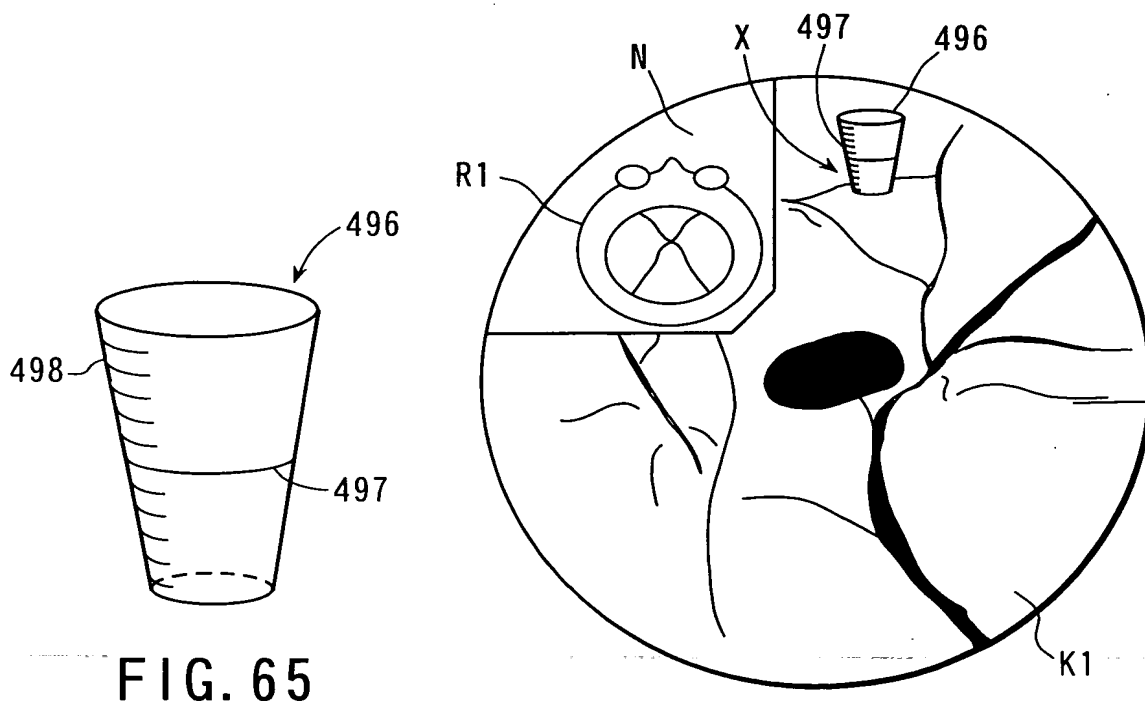


FIG. 65

FIG. 66

FIG. 67B

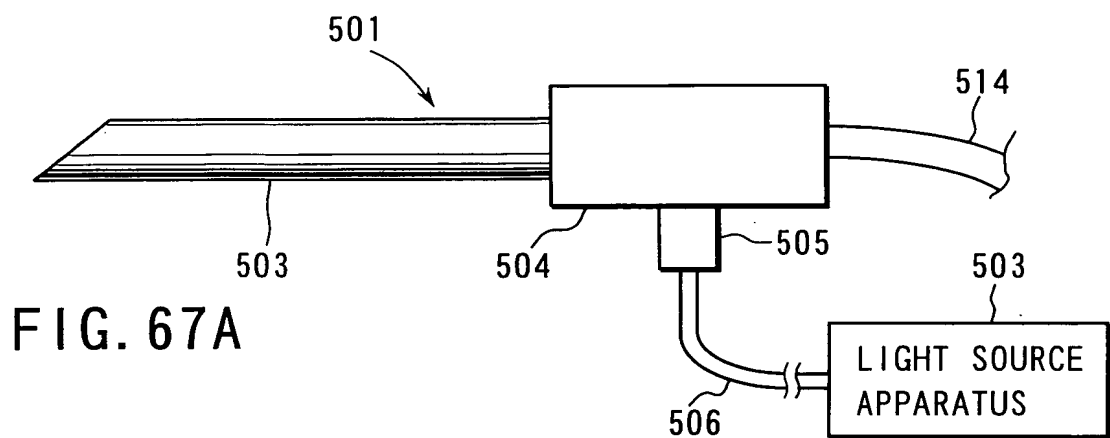
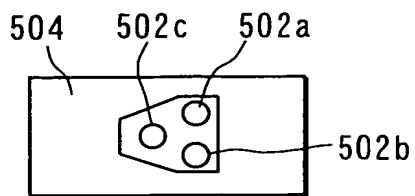


FIG. 67A

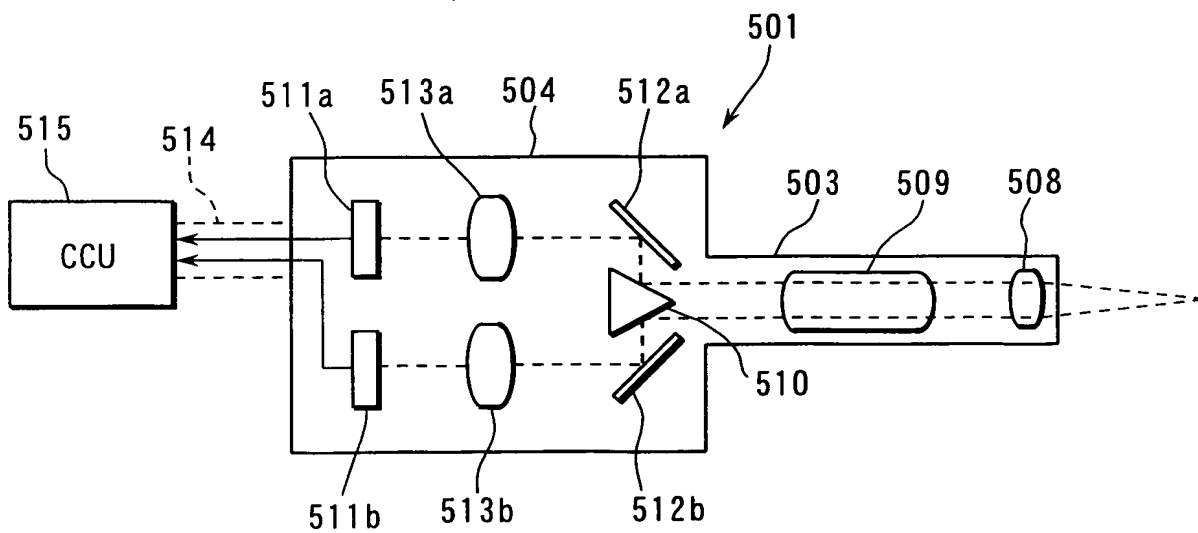
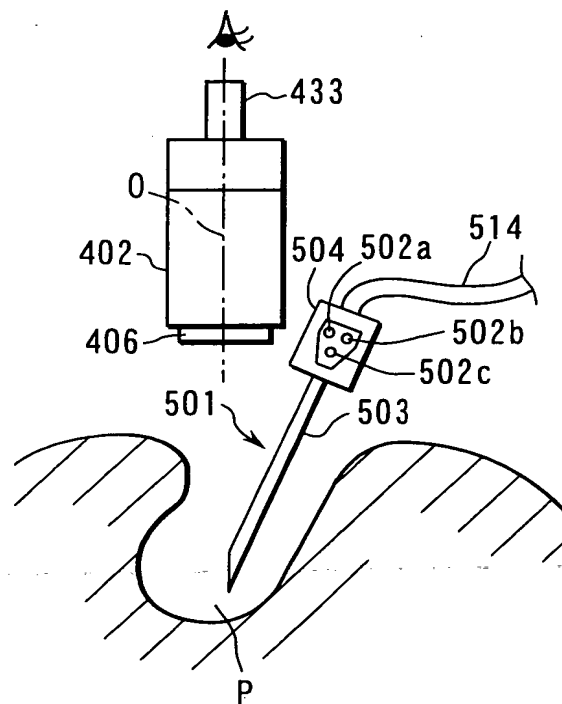
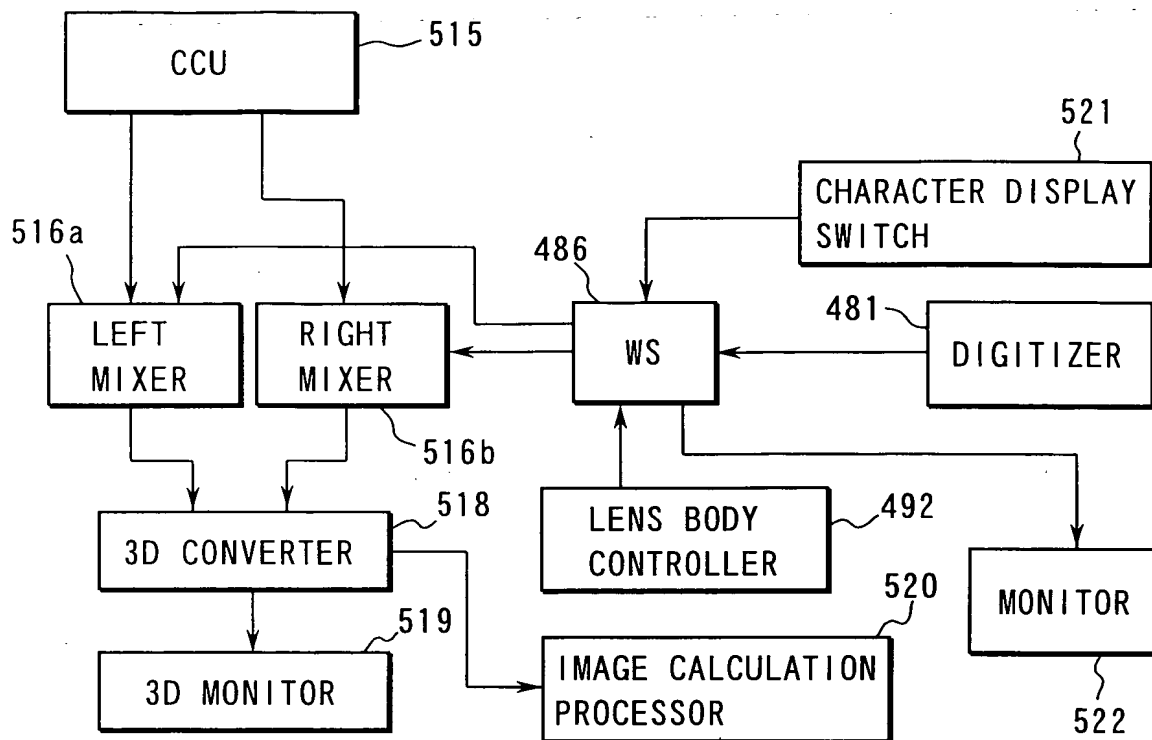


FIG. 68



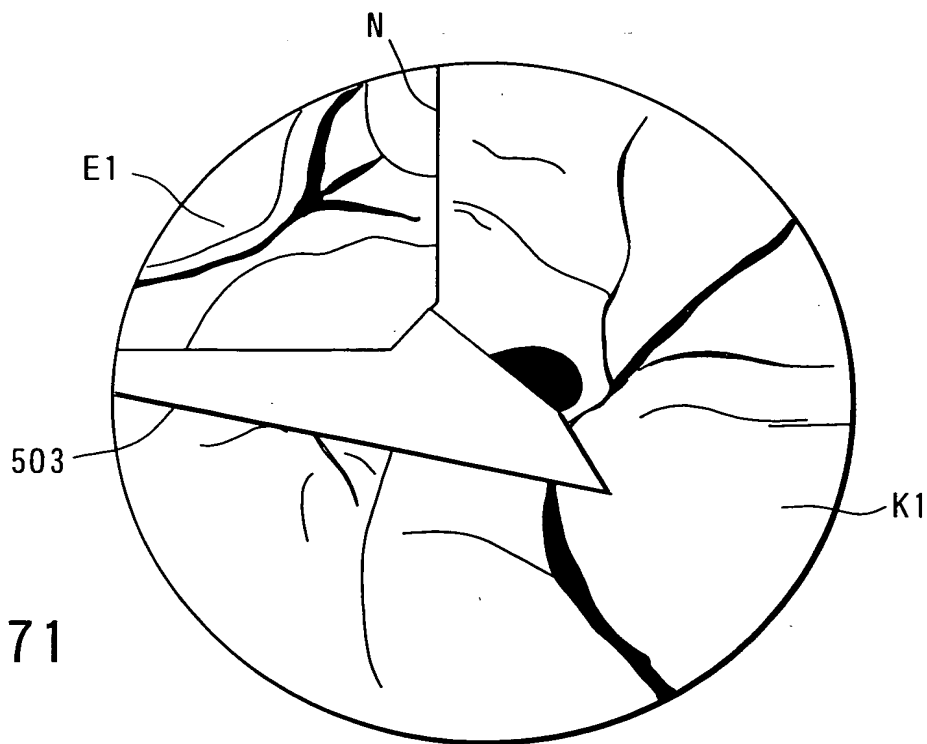


FIG. 71

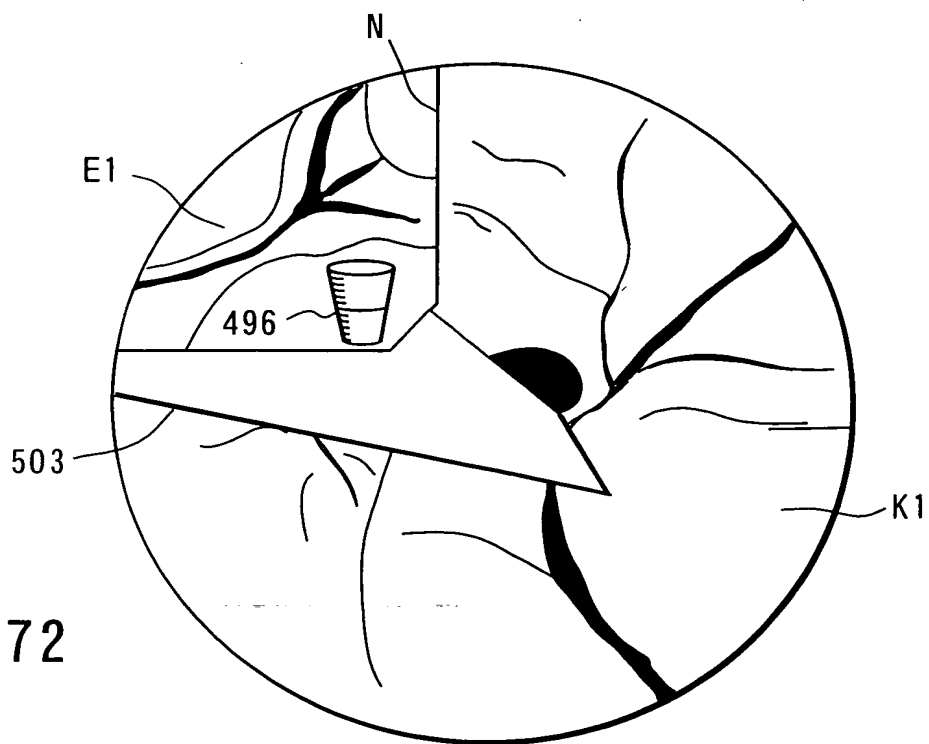


FIG. 72

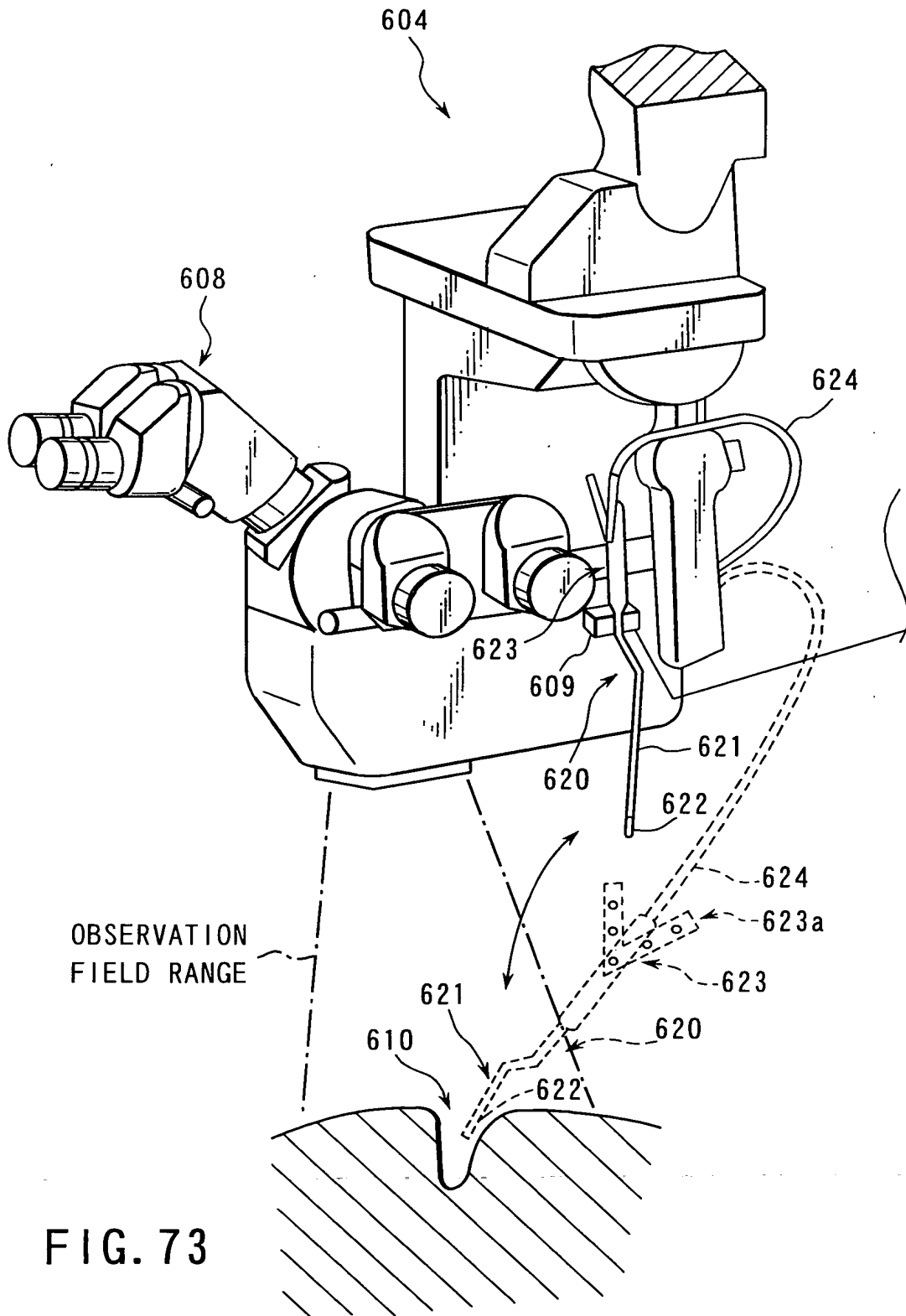


FIG. 73

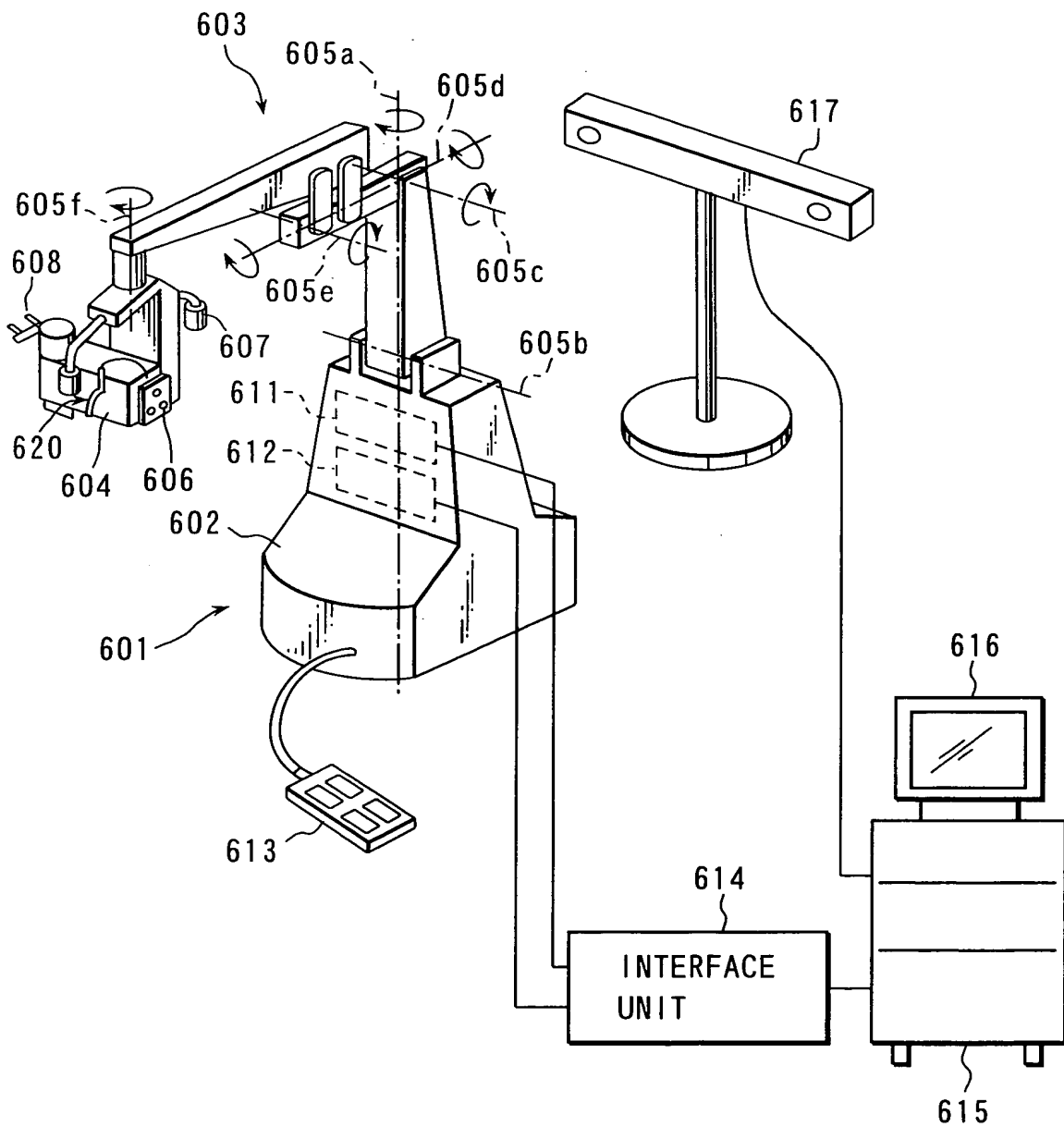


FIG. 74

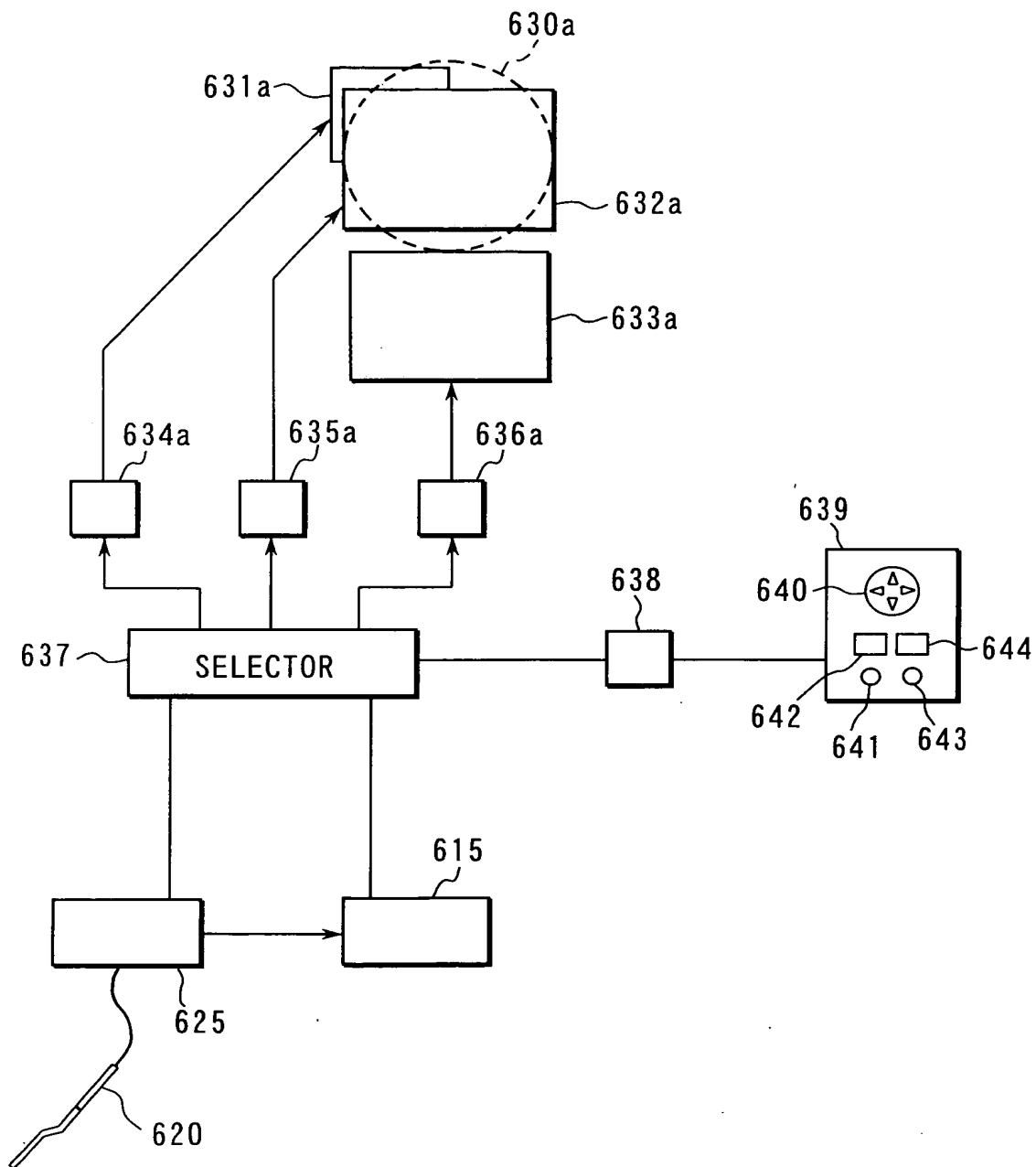


FIG. 75

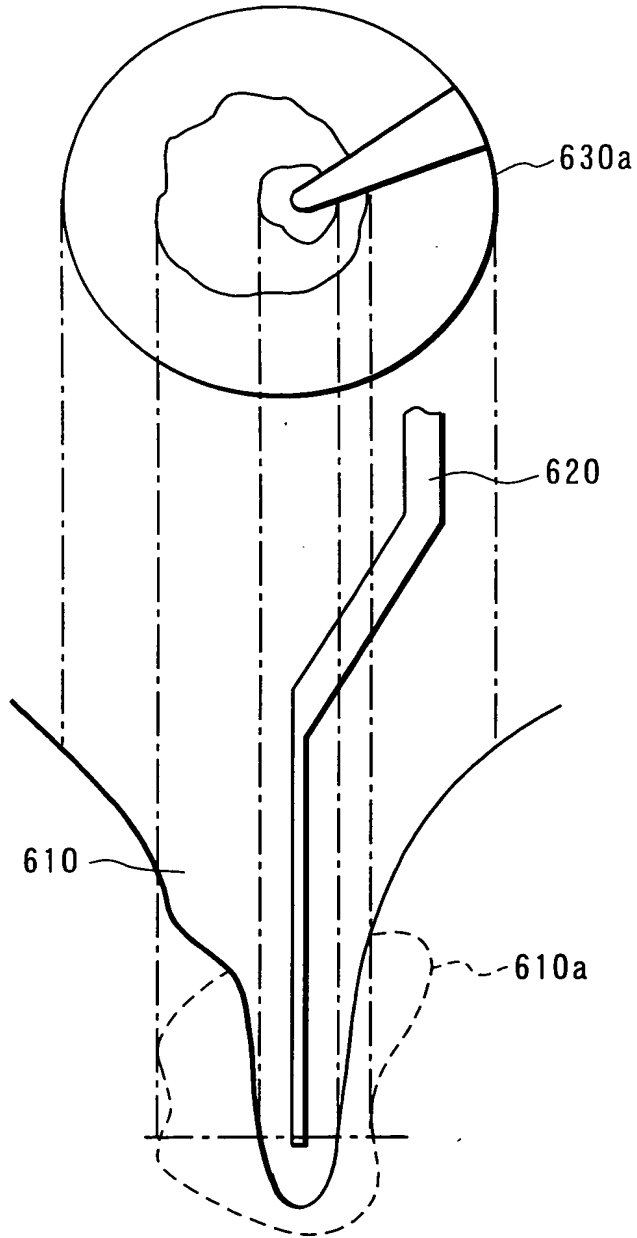


FIG. 76

```
graph TD; START([START]) --> S1[INSERT US PROBE IN MICROSCOPE FIELD]; S1 --> S2[DISPLAY NAVIGATION IMAGE (SMALL SCREEN)]; S2 --> S3[DISPLAY US IMAGE (LARGE SCREEN)]; S3 --> S4{SWITCH INPUT?}; S4 -- YES --> S5[DISPLAY NAVIGATION IMAGE IN LARGE SCREEN AND US IMAGE IN SMALL SCREEN]; S4 -- NO --> S4;
```

The flowchart illustrates the navigation image display method. It begins with a START terminal, followed by step S1: INSERT US PROBE IN MICROSCOPE FIELD. This is followed by step S2: DISPLAY NAVIGATION IMAGE (SMALL SCREEN), then step S3: DISPLAY US IMAGE (LARGE SCREEN). A decision diamond S4 asks if there is a SWITCH INPUT?. If YES, the process proceeds to step S5: DISPLAY NAVIGATION IMAGE IN LARGE SCREEN AND US IMAGE IN SMALL SCREEN. If NO, the process loops back to the input point before the decision diamond.

FIG. 77

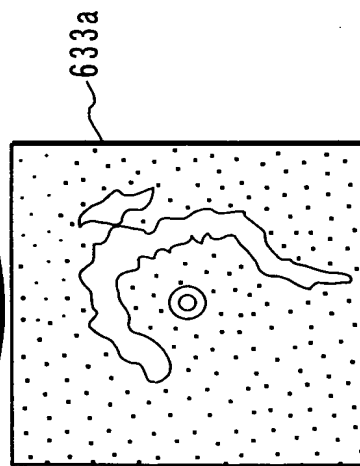
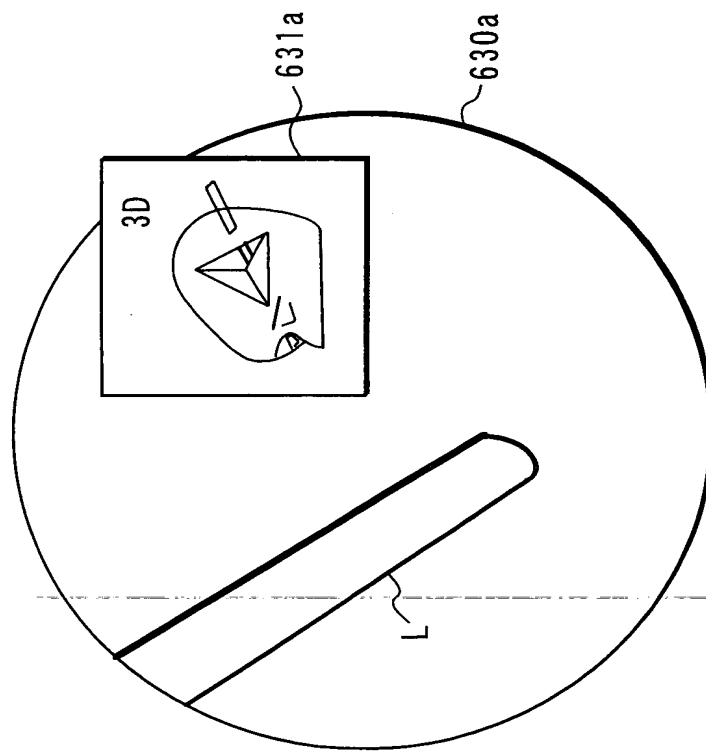


FIG. 78A

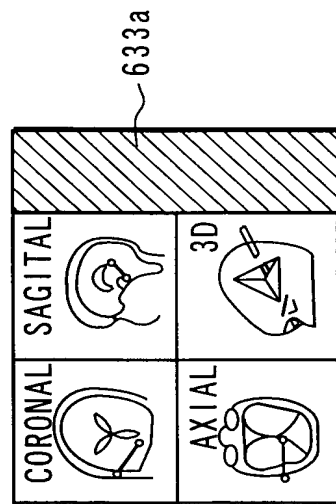
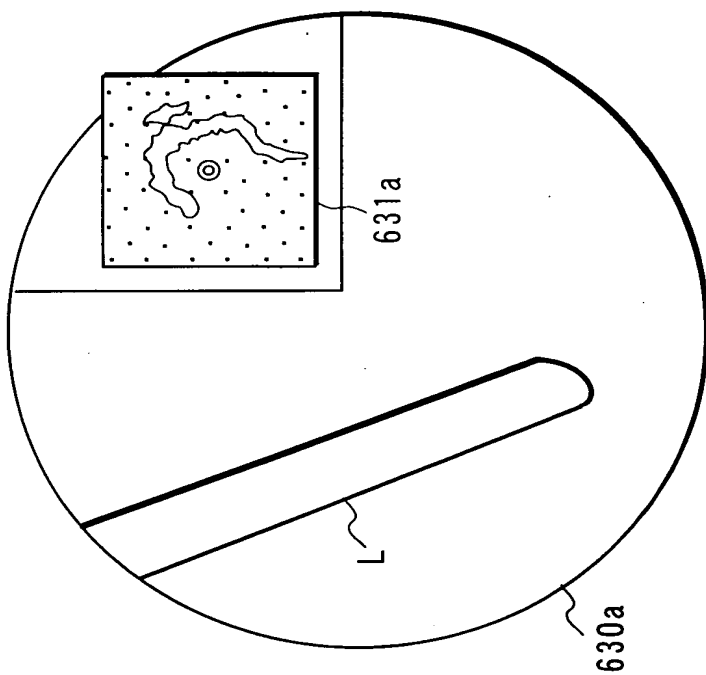
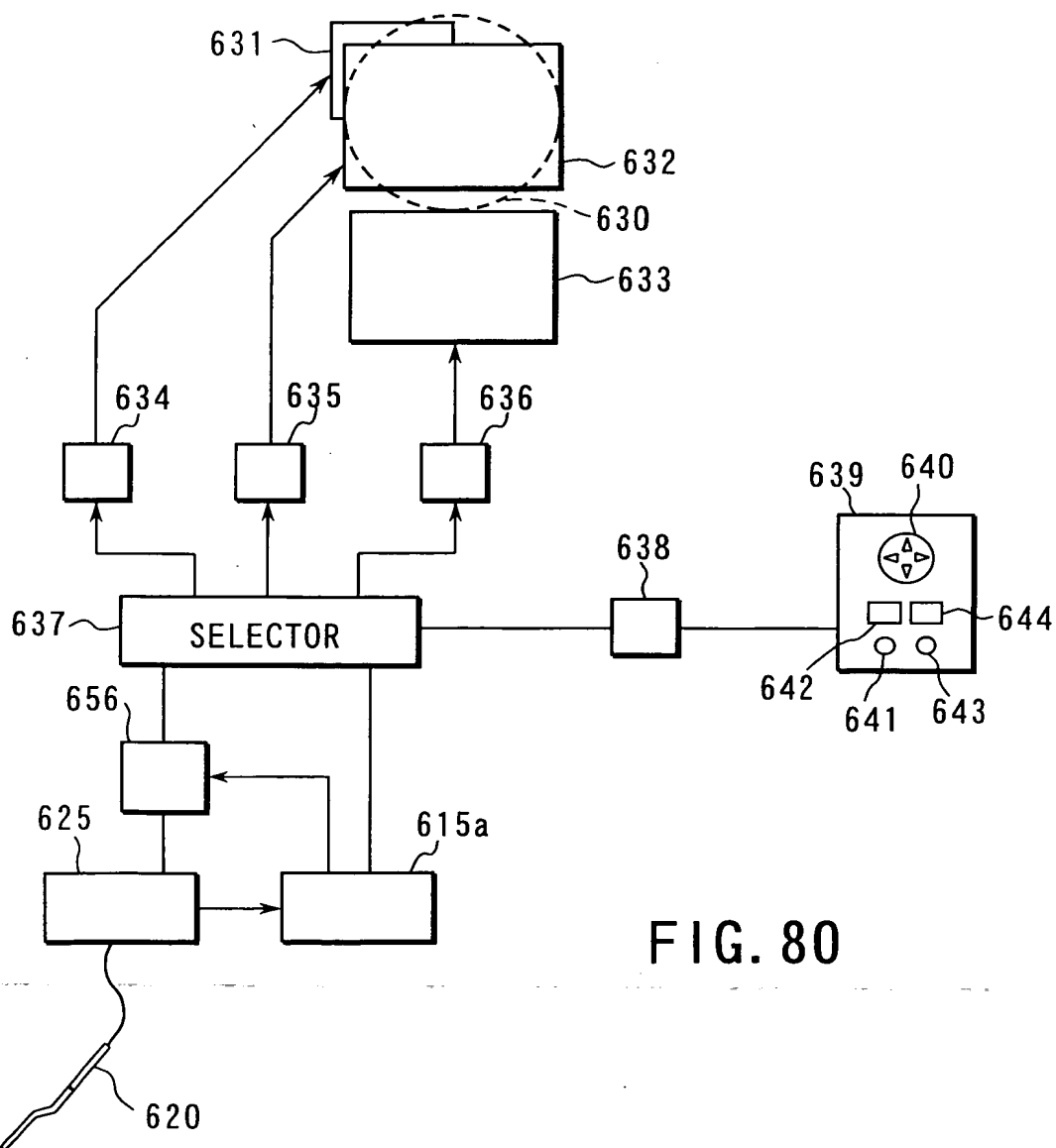
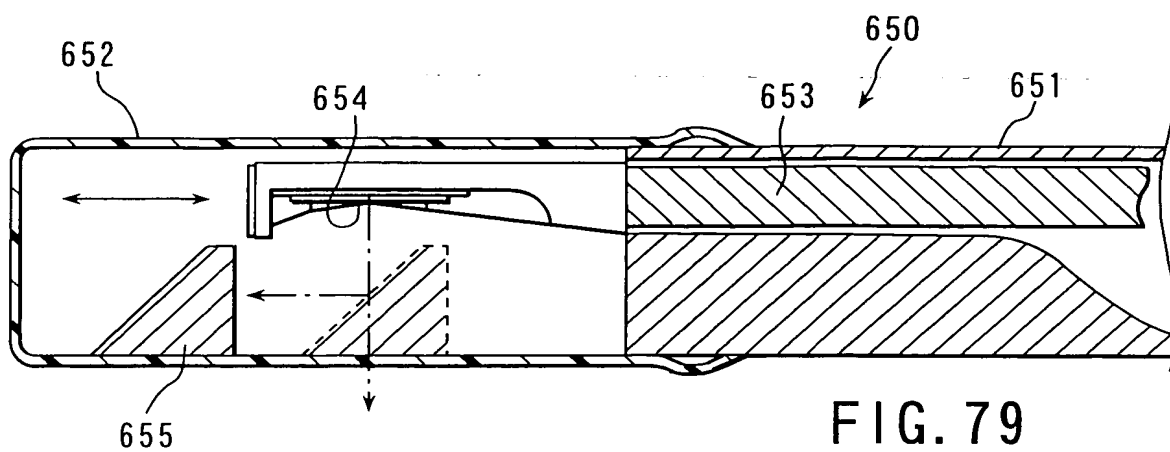


FIG. 78B



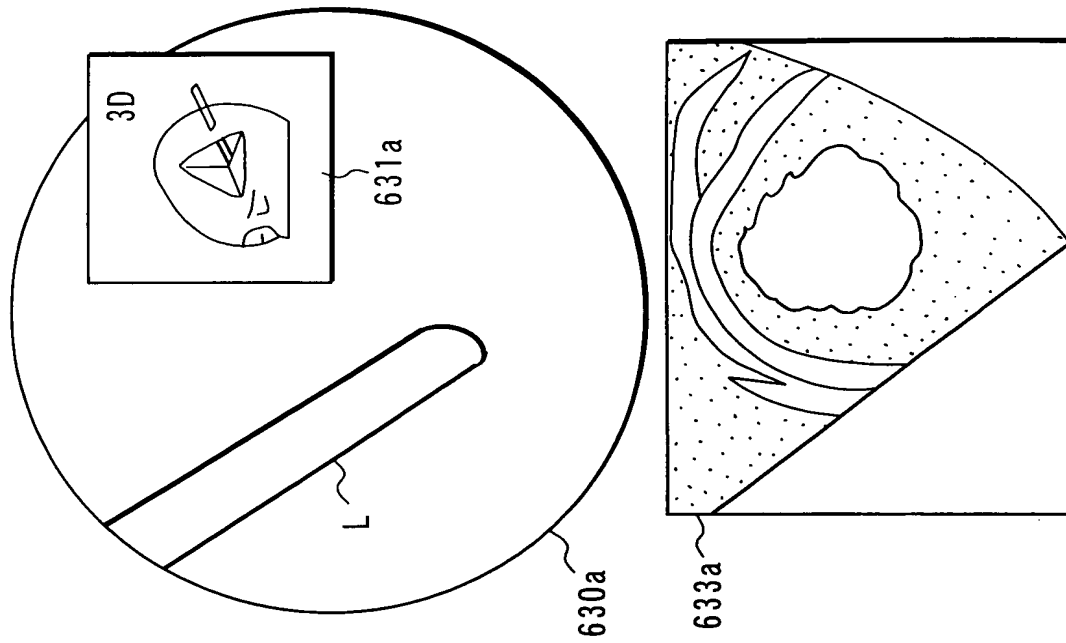


FIG. 81

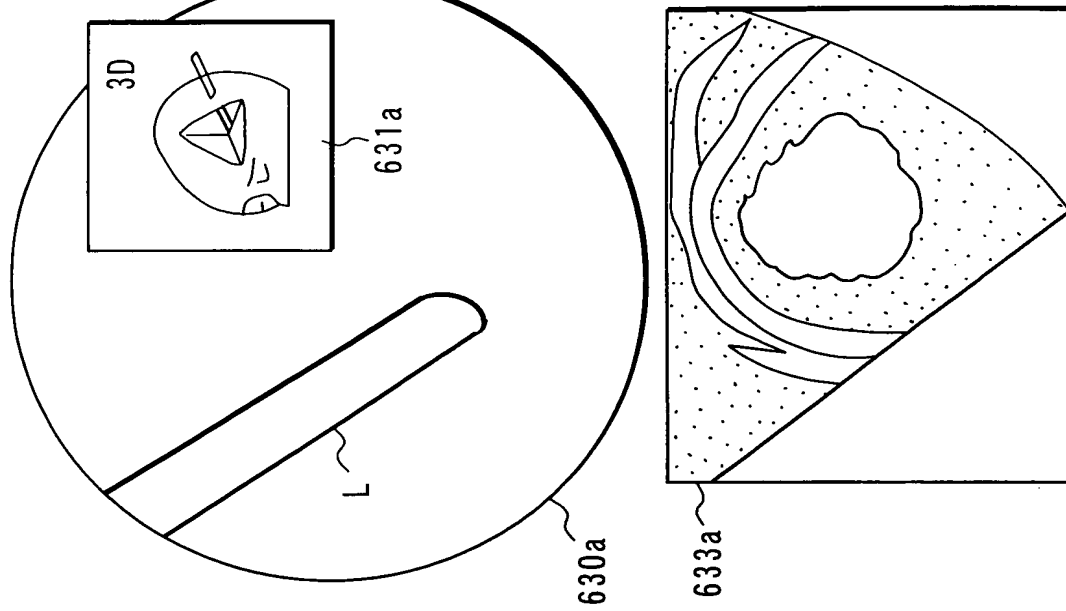
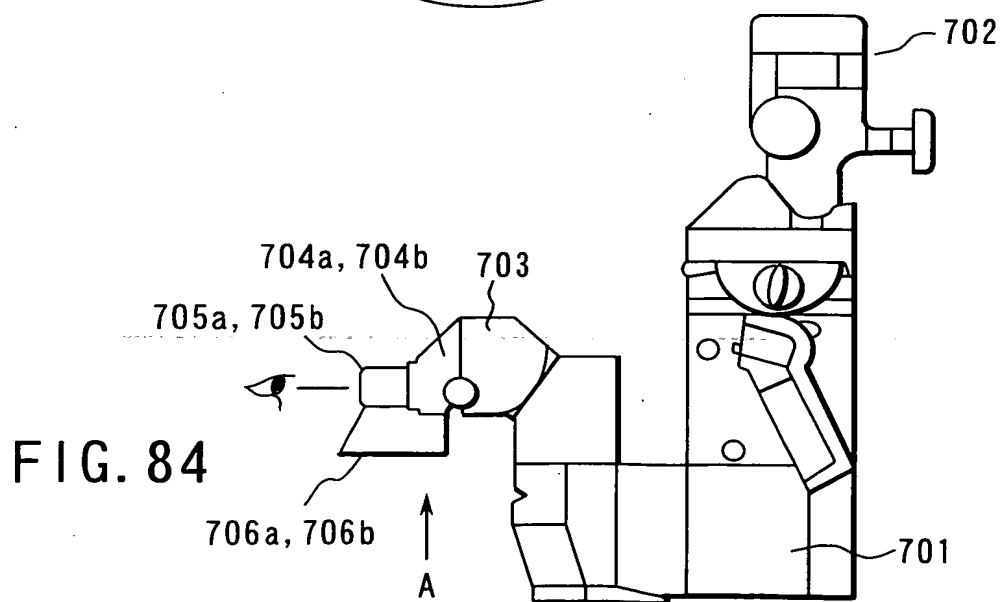
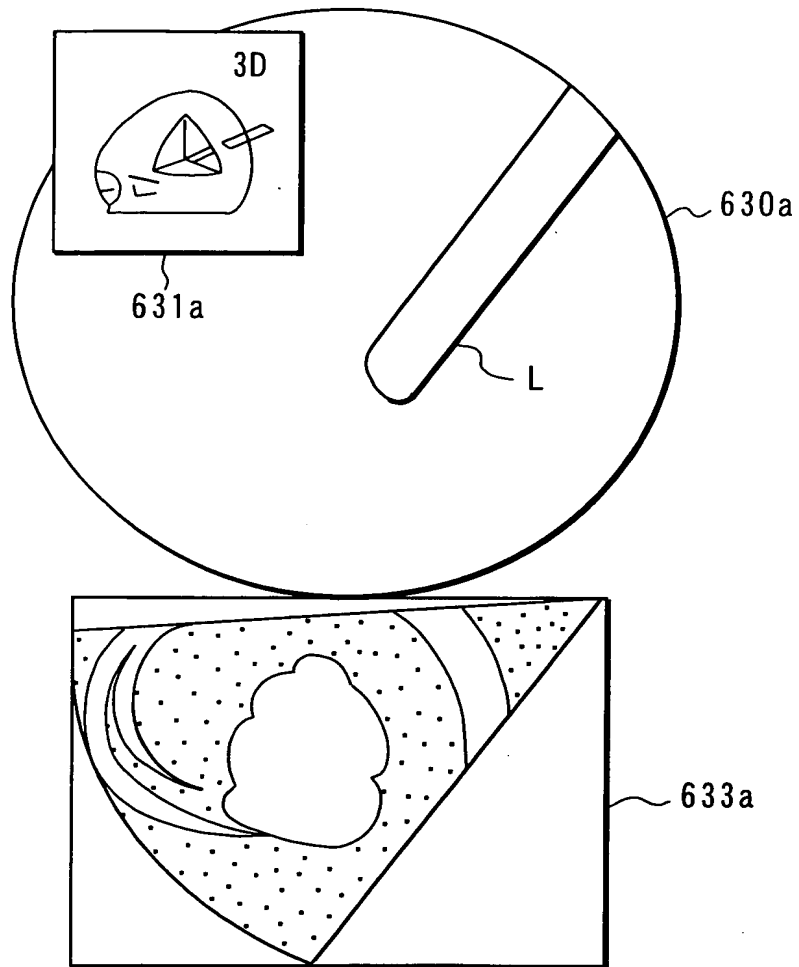
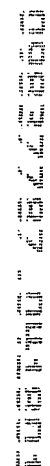
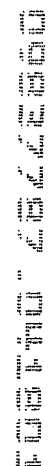


FIG. 82



[illegible][illegible]

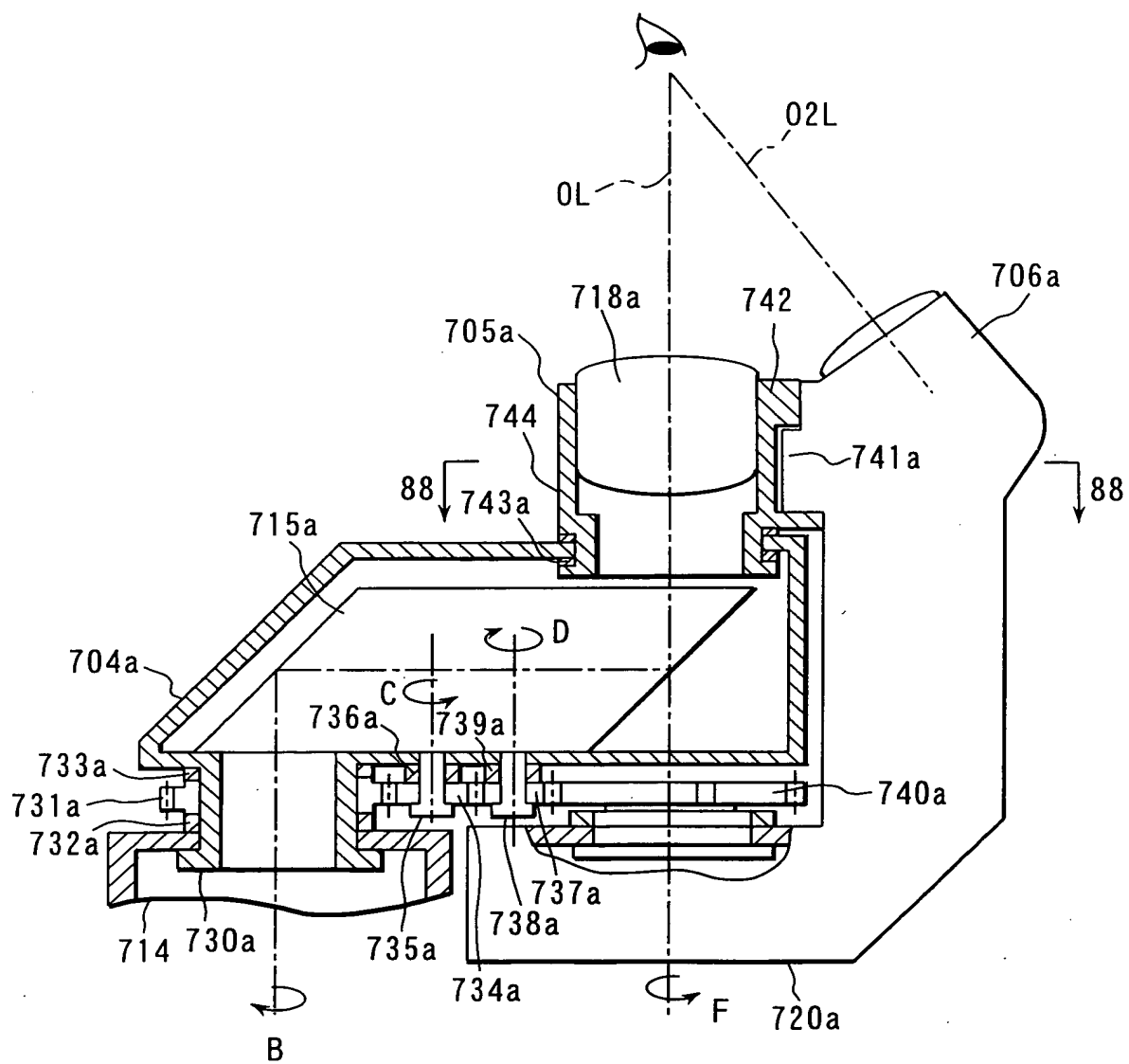


FIG. 87

FIG. 88

FIG. 88

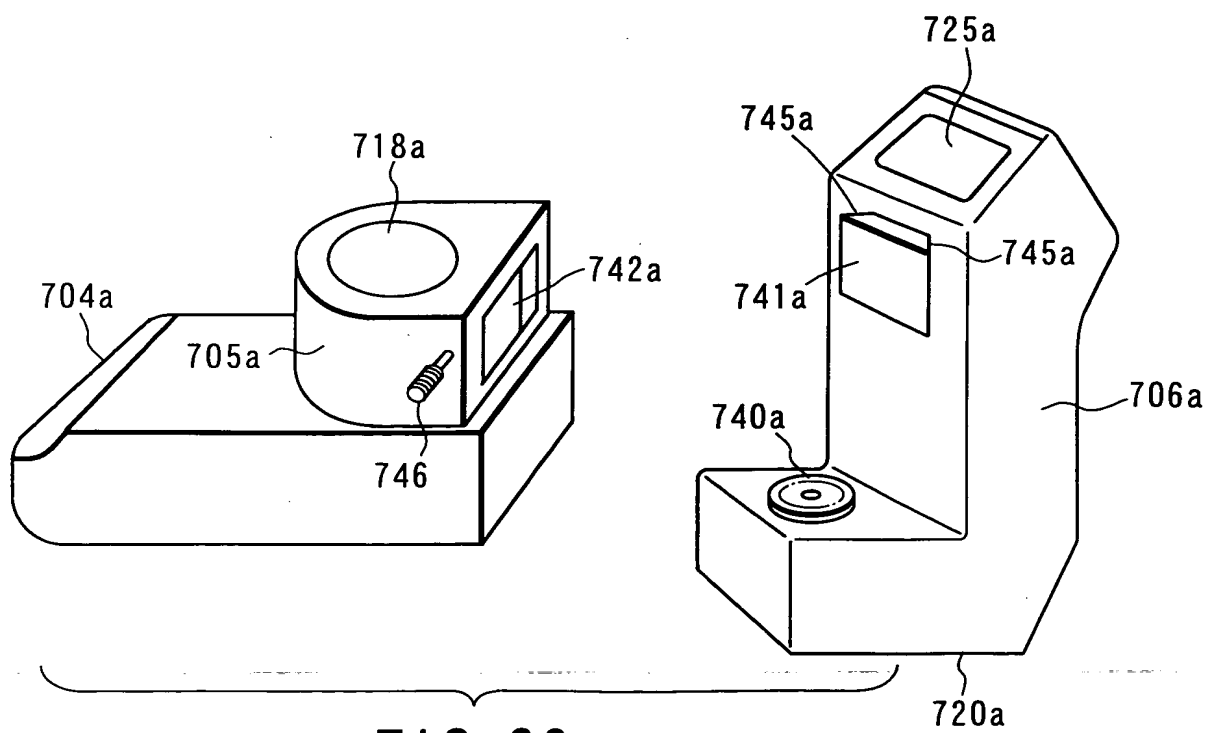
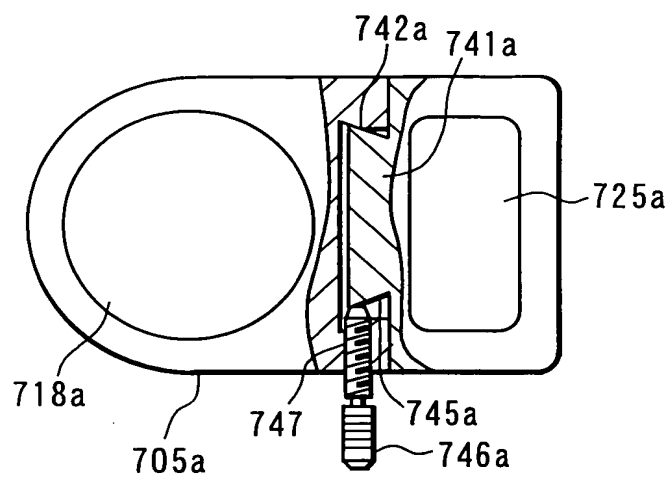


FIG. 89

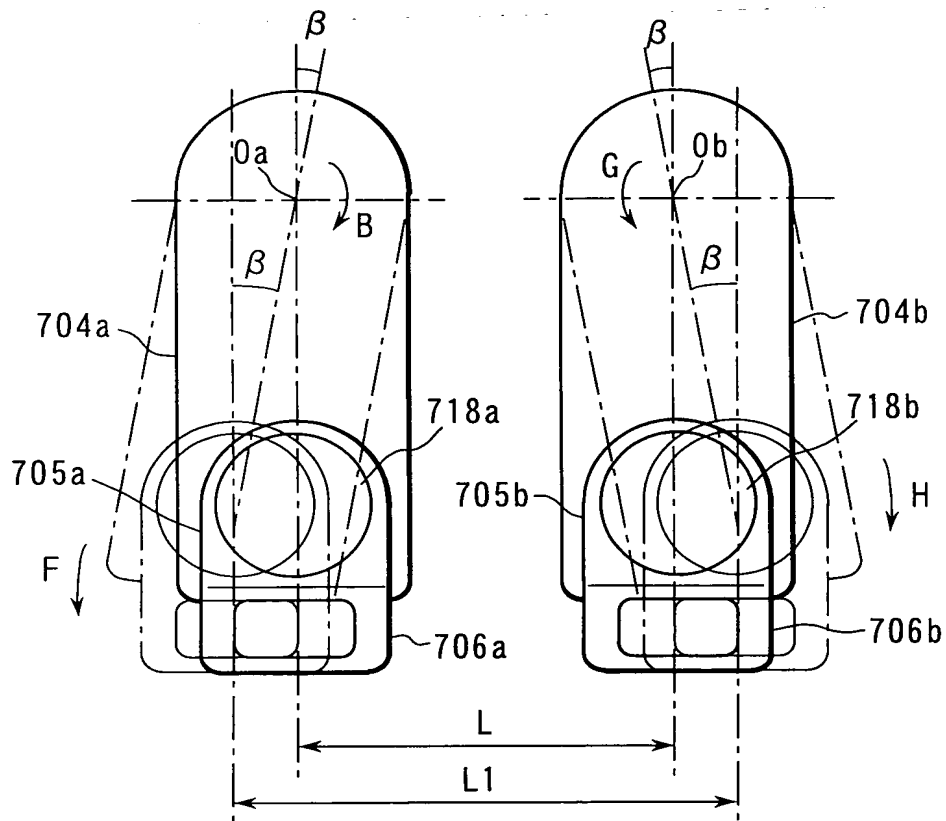


FIG. 90

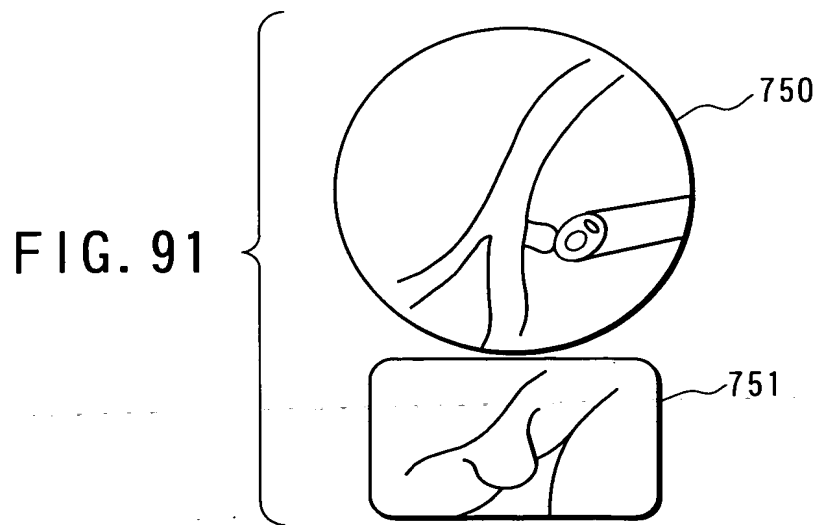


FIG. 91